Lettsomian Lectures
ON
EXCISIONAL SURGERY OF THE JOINTS FOR DISEASE.

Delivered before the Medical Society of London.

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LECTURE III.—PART II.

SHOULDER-JOINT.—WRIST.—HAND.

DISEASE of the Shoulder-joint occurs so much less frequently than that of other joints as to considerably restrict the opportunities for clinical observation respecting its seat of origin, the probability of natural anchylosis ensuing, or the necessity of operative interference by excision to bring about that issue. The synovial membrane, in some cases, would appear to be the seat of the disease; and then, suppuration being a rare event, fibrous anchylosis usually ensues. But caries, in other cases, is the mode of origin, affecting the head of the humerus, less commonly the glenoid cavity, or only secondarily and partially; and then natural anchylosis rarely takes place. Caries external to the joint—as of the coracoid process, the acromion, or spine of the scapula—must not be confounded with disease of the shoulder-joint.

Thus may be recognised as indications for operation the following:—

Conditions of shoulder-joint disease appropriate for excision. (1) When disease, commencing either in the synovial membrane or as caries, has extended to and destroyed the articular cartilages of the head of the humerus, or of the glenoid cavity of the scapula, or of both surfaces, without the supervention of anchylosis. The constitutional condition should not have advanced to exhaustion; although in even an extreme state of hectic and emaciation recovery after excision of the shoulder-joint is more probable than after such operation on any other large joint.

Necrosis of the head of the humerus generally necessitates excision of this portion of bone, but sometimes, in central necrosis, the sequestrum can be extracted without excision.

Caries or necrosis of the coracoid process or of the acromion is, of course, a condition of disease not requiring excision of the joint.

(2) Osseous anchylosis, a rare condition, with perhaps malposition of the limb, would scarcely ever justify the risk of excision.

The amount of bone to be removed is rarely extensive, the disease being limited usually to the head of the humerus, while the glenoid cavity is comparatively seldom affected, and even then may usually be left untouched, or only scraped.

Operation. — Excision of the shoulder-joint for disease is commonly said to have been originated by Mr. Chas. White, of Manchester, in April, 1768. He had previously excised the head of the humerus on the dead subject; but the operation in question consisted in removing the upper part of the humerus for necrosis, leaving the head of the bone in the glenoid cavity. Similar excisions were performed by Vigaroux, of Montpellier, in 1767; and perhaps by David, of Rouen. Ridewald, in April, 1770, appears to have first removed the head of the humerus for arthritic disease, the patient being a man fifty years old, in a wretched condition of health; secondary amputation was resorted to for suppuration and hæmorrhage, and death ensued. This operation was followed in the next year (1771) by another case: Mr. James Bent, of Newcastle, excised the head of the humerus for caries of three years' standing, and with entire success. In the same year the operation was performed by Leutin; then, in 1778, by Mr. Daniel Orred, of Chester; and in 1786 by the elder Moreau—a complete excision of the humerus, the glenoid cavity, and a portion of the acromion; the result being successful. Mr. Syme revived the operation in 1826.

An elliptical incision, ⋃, is the best form of incision, as it exposes the joint most thoroughly for examination, and facilitates the application of instruments. Sometimes a ⌋, or a ⅂ or a ⊤ incision may be preferable; and, in truth, the shape of the flap must be guided by the state of the integument with regard to sinuses or otherwise. Supposing an elliptical to be selected: A bistoury is entered at the posterior border of the acromion, and carried down with a sweep across the insertion of the deltoid, upwards to the inner border of the coracoid process. The flap, embracing the deltoid muscle, is raised by a few touches with the knife, and, by slight adduction and rotation of the arm, the head of the humerus is turned out of the glenoid cavity, the capsular ligament having disappeared. Or the single linear incision may be made. An assistant protecting the soft parts with a spatula on the inner aspect of the bone, the saw is applied below the diseased portion. The head, neck, and proximate part of the shaft may be thus removed, avoiding if possible the circumflex arteries. Any carious portion of the glenoid cavity may be scraped with a gouge. As a rule, with very rare exceptions, the glenoid cavity should not be excised. The flap is replaced, and retained by sutures; and the arm, with an axillary pad, may be bound to the chest, as for fractured clavicle; or supported on a pillow, extending as a splint from the axilla. Subsequently the forearm must be supported in a sling.

RESULTS.—(1) *In relation to life, or the mortality.*—Statistics are not, at present, sufficiently comprehensive to establish more than one general conclusion respecting this question. The average mortality appears to be 1 in 5 or 6; or about 20 and 16 per cent. respectively. Of 50 cases collected by Dr. Hodges, 8 died; 1 in 6, or about 16 per cent.; and in 7 of the 8 fatal cases the glenoid cavity had been interfered with. Of the 30 cases in the hospital collection below, the death-rate was nearly 1 in 4, or 25 per cent.

Author's Collection.

Royal Infirmary, Edinburgh; period, 1865–69. (Per Mr. P. H. Watson.) Number of cases, 10; recoveries, 7; deaths, 3.

Liverpool Royal Infirmary; period, last five years. (Per Mr. W. J. Cleaver.) Number of cases, 7; recoveries, 6; deaths, 1.

London Hospital; period, last five years. (Per Mr. McCarthy.) Number of cases, 3; recoveries, 1; deaths, 2.

Westminster Hospital; period, last five years. (Per Mr. F. Mason.) Number of cases, 3; recoveries, 3.

St. Bartholomew's Hospital; period, 1866–70. (Per Mr. Callender.) Number of cases, 2; recoveries, 1; deaths, 1.

Guy's Hospital; period, 1864–69. (Per Mr. T. Bryant, from Dr. Steele, superintendent.) Number of cases, 2; recoveries, 2.

St. Thomas's Hospital; period, 1866–70. (Per Mr. F. Churchill.) One case; recovery.

Charing-cross Hospital; period, 1865–70. (Per Mr. Hancock.) One case; recovery.

Royal Free Hospital; period, 1865–70. One case; recovery.

King's College Hospital; St. Mary's Hospital; Great Northern Hospital; Royal Albert Hospital, Devonport; Chalmers' Hospital, Edinburgh; Royal Sea-Bathing Infirmary, Margate: period, each, last five years. No cases.

(2) *State of the limb.*—In 4 of the 50 cases collected by Hodges the operation was unsuccessful, leaving a balance of 46 successful cases.

The *average period of recovery*, with some use of the limb, as calculated from 31 of the cases, was four months; "a much longer period, however, than this elapsed before the limb could be said to become really serviceable."

The resulting state of the joint would seem to be that the limb can never be elevated above the horizontal line; while in many cases it hangs down, without any power whatever in the deltoid, at a greater or less distance from the scapula. But the movements of flexion, extension, and adduction are usually free; abduction can often be effected to the extent of raising the arm considerably from the side; and there is generally sufficient power in the *forearm* to carry heavy weights and perform many of the ordinary domestic tasks. The arm is, therefore, a very useful one, irrespective of the vast importance of preserving the hand, and thus the person is enabled to follow many of the ordinary trades.

The following cases well illustrate the successful results of shoulder-joint excision for disease. I have abstracted the first case from careful clinical notes by Mr. T. C. Murphy.

CASE 1.—John C——, aged twenty-one, admitted into the

Royal Free Hospital July 30th, 1870. The patient, of naturally good constitution, had never suffered from rheumatism; but for the last two years he had habitually drunk hard. At about the commencement of that period he was struck with a stick on the right shoulder. Three months afterwards a small abscess formed at the anterior margin of the axilla; it was opened, and has continued to discharge ever since. The arm gradually became more fixed and drawn to the side. In the course of six months a large abscess, the size of a fist, formed under the spine of the scapula; this was opened at St. Bartholomew's Hospital. Other abscesses have since formed; so that, on admission, the shoulder presented considerable enlargement, and seven sinus-openings—three posteriorly, two externally through the deltoid muscle, and two anteriorly in the angle of the axilla. From the date of injury up to the present time the joint has been painless, unless the arm was forcibly moved. The general health is much reduced by the profuse and long-continued discharge. I therefore endeavoured to restore the patient, as far as possible, constitutionally and locally, by a sustaining diet and rest of joint; and, as he retrogressed occasionally from attacks of diarrhœa, I postponed interference, watching the most favourable opportunity for operation. At length, after two months and a half of this manœuvring, on October 15th I excised the joint, performing the operation by the elliptical incision, so as to embrace and raise the deltoid muscle, thus to thoroughly expose the whole joint. The remnant head of the humerus was sawn through below the great tuberosity, observing my usual precaution in all joint-excisions not to detach the vascular connexion of the surrounding integument, and making the section just level with its attachment. The glenoid cavity, denuded of cartilage, was slightly scraped and freshened with a gouge. Torsion of one or two small vessels, and one ligature, sufficed to arrest the trifling hæmorrhage. The flap being laid down, and closed by a few points of suture, no retentive splint was applied; an axillary pad, and a bandage as for fractured clavicle, kept the osseous surfaces in apposition, and the arm on the chest. The wound healed throughout by primary union, discharging only from its angles, while the sinus-openings gradually dried up. The result, at the end of about six weeks, was a freely movable joint in all directions, circumduction and rotation, with power to perform these movements, but only to a limited extent that of raising the arm by abduction horizontally. The general health had so far improved that, regaining some flesh and strength, the patient became cheerful, and said "he felt better than he had done for years." He left his bed daily. Subsequently, however, attacks of diarrhœa recurred from time to time, and the abdomen became tumid and tympanitic; enlargement of the liver, assumed to arise from amyloid or albuminous degeneration, was diagnosed by my colleague Dr. Cockle, under whose care the patient afterwards remained. He died from this organic disease on Feb. 4th—three months and a half after the operation, from which he had entirely recovered, and with a freely movable joint. The post-mortem examination verified the diagnosis, and preserved the articulation, as a perfect specimen of a new ball-and-socket joint; an entire capsular ligament has formed, and the section-end of the humerus moves freely on the glenoid cavity of the scapula—in circumduction and rotation.

CASE 2.—E. F——, aged seventeen, a young lady, the daughter of a practitioner well known in this metropolis. I was invited by him (January, 1871) to witness the result in this case, and I am thus enabled of my knowledge to speak of its perfect and permanent success. At the same time he communicated the following important particulars to me respecting its history: Six years ago, when this young lady was between ten and eleven years of age, she apparently took cold while resting on a seat in Hyde-park. Her previous health having been always good, and as she had never received any injury to the shoulder, this was the only assignable cause of what took place. The right shoulder-joint became very painful, and acute inflammation set in, followed by free suppuration in forty-eight hours. Dr. Sibson saw the case, and then, by his recommendation, Mr. Samuel Lane, who immediately opened the abscess. It continued to discharge copiously for two months—so abundantly indeed that the father, who measured with an half-ounce spoon the quantity of matter discharged from day to day, thus calculated that the patient lost during this short period three gallons of pus. Her constitutional condition accordingly was much reduced. Then, two months from the date of apparent origin, Mr. Lane excised the shoulder-joint, assisted by Mr. James Lane and Mr. Gascoyen, Mr. Pollock and the father also being present. A longitudinal incision was made on the front of the humerus, apparently at the inner border of the deltoid muscle, from opposite the coracoid process downwards to about three inches in extent, and a short transverse cut superiorly, forming a T-shaped incision. Two inches and a half of the humerus were removed, and the glenoid cavity, in a deeply carious state, was freely gouged. The patient made an uninterrupted recovery. As reparation ensued, the appetite became voracious, and assimilation equally active. Nourishing food—meat, eggs, milk, with port wine, champagne, porter, &c., were taken eagerly at frequent intervals by day, and even in the night. Being naturally intelligent, she declined any tonic medicine, as she felt her flesh and health returning, her suggestive remark being, "Which do you think will do me the most good, that which I like or what I don't like?" The voice of nature, thus proclaimed by nature's child, was heeded. She made a complete recovery, and the result is, that although the arm is four inches shorter than its fellow, she moves it freely backwards and forwards, without, however, the power to raise it horizontally unless aided by the left hand. The motions of the forearm are perfect, so that she can work readily, write, or play the piano. The limb is, therefore, a most useful one, and this result has now been permanently established by six years' service.

WRIST.

Excision of the Wrist comprises, properly speaking, not only the removal of the articulatory portions forming the radio-carpal articulation or wrist-joint, but also the carpus and bases of the metacarpal bones; this extent of excision differing from that of the analogous operation on the ankle-joint, which is restricted to the removal of the articulatory portions of the tibia and fibula, with that of the astragalus.

Conditions of wrist-disease appropriate for excision.—*Partial* or *complete* disease of the wrist cannot be referred, like that of the larger and more simple joints, to an independent origin, either in the synovial membranes—three in number—or in the bones of the wrist. The lower articular end of the radius and that of the ulna, which in relation to excision is associated with the wrist—the carpus below, consisting of eight bones, in two ranges of four in each—and the bases of the five metacarpal bones, are all so contiguous as to obscure the precise seat of origin in caries affecting the wrist. Then, again, the three synovial membranes are as one, in relation to the origin of disease in the form of synovitis;—the membranous investment of the radio-carpal articulation, which sometimes communicates with that of the radio-ulnar articulation through a perforation in the intervening triangular fibro-cartilage; the investment between the two ranges of carpal bones, with its two prolongations upwards, and sometimes extending into the synovial membrane of the radio-carpal articulation, and the three prolongations downwards which always extend to and invest the four inner carpo-metacarpal articulations; and the separate synovial sac for this articulation in the thumb.

Caries of the wrist appears to be generally of scrofulous, and thence constitutional, origin—excited, perhaps, by some injury of apparently trifling character, as a sprain; while synovitis seems to have another constitutional origin, probably as chronic rheumatism.

Thus we recognise as conditions of disease for excision:—

(1) Scrofulous caries of the wrist, often involving the lower articular end of the radius and ulna, the whole of the carpal bones, and the bases of the metacarpal bones, in a state of extensive caries.

(2) Chronic synovitis, of perhaps more limited extent, but leading to caries and destruction of the articulations.

The *amount of bone* to be removed, as being apparently diseased, may vary according to the character and extent of the disease. Thus excision might include the lower ends of the radius and ulna, with the adjoining carpal bones—in the wrist-joint, or the bases of some or all of the metacarpal bones. But Professor Lister insists on the complete extirpation of the wrist in *all* cases, from the lower ends of the radius and ulna to the bases of the five metacarpal

bones inclusive; the disease, however limited it may appear, being apt to recur in the articulatory portions left by a partial excision.

Operation.—Excision of the wrist was originally performed by the younger Moreau, at the close of the last century; subsequently, by a German surgeon, Dietz, in 1839; and then again by Heyfelder, of Erlangen, in 1849; but, in this country, the operation was revived by Sir Wm. Fergusson, in August, 1851. Since that period it has been resorted to by Mr. Simon, Mr. Erichsen, the late Mr. Stanley, and Mr. Butcher of Dublin; and practised especially by Professor Lister of Edinburgh, who has devised a particular method of operation for complete excision of the wrist.

Partial excision consists in the removal of only one or two of the carpal bones, or other limited portions of the bones forming the wrist. This procedure can be readily effected by slitting up any fistulous aperture leading to the carious bone, and extracting it by bone-nippers and forceps.

Complete excision may be performed in either of three ways. The choice of method is mainly determined by the consideration of difficulty in removing the affected bones without dividing the extensor tendons of the fingers and thumb; the supinator tendons, radial and ulnar extensor tendons, inserted into the bases of metacarpal bones, being comparatively unimportant, in consequence of the firm fibrous anchylosis of the wrist after operation, if the result be successful.

First method.—A curvilinear incision is made, extending from just above the styloid process of the radius, downwards across the back of the wrist, and upwards to the same level above the styloid process of the ulna; the flap of integument is reflected, carefully avoiding the extensor tendons of the fingers, and those of the thumb, on the ulnar half of the radius. Then, dividing the supinator tendons, and the extensor tendons of the carpus, and flexing the wrist, the radio-carpal articulation is opened; and while the other extensor tendons referred to are drawn aside with a curved spatula by an assistant, the articular ends of the radius and ulna, the carpal bones, and bases of the metacarpus, are successively removed by a small saw or cutting pliers introduced transversely.

Second method.—Two *lateral* longitudinal incisions are made, one on the ulnar, the other on the radial side, of the wrist, or on its *dorsal* aspect, thus readily avoiding the extensor tendons of the fingers and that of the first joint of the thumb. The operation is then continued as before, and completed by excising the bones in the same manner.

A *single ulnar* incision is deemed sufficient by Sir W. Fergusson, and as the best mode of operation.

But Prof. Lister has particularly pointed out that there are two obvious and important objections to the lateral method, which somewhat resembles that which he has devised. First, the radial incision is so placed as probably to sacrifice the extensor tendons of the metacarpal bone, and of the second joint of the thumb. Secondly, with regard to the bones, that in the transverse division of the bones an unnecessarily large amount of bone is removed from the radius and ulna, and from the metacarpus—a loss of length and breadth which interrupts the process of consolidation, and results in a more narrow wrist and impaired strength of the hand. Moreover, the bones being divided in the dark, that some portion of the disease may probably be left behind.

To obviate these difficulties as to the excision of the bones, and to avoid the tendons requisite for the efficient use of the hand and fingers, another method of operation has been proposed and practised by Professor Lister. It consists in two essential peculiarities; the radial incision is so placed, on the dorsal aspect of the radius, as to avoid the tendons which are otherwise liable to be implicated—the extensor ossis metacarpi pollicis, and the extensor secundi internodii, while the limited but complete excision of the bones is accomplished by first removing the carpus, and then the articular ends of the radius and ulna and the bases of the five metacarpal bones.* The hand is placed on a suitable splint, extending up the forearm and secured by a bandage. The most convenient form is an ordinary wooden splint, with an obtuse-angled piece of thick cork cemented to the palmar portion by means of fused gutta-percha, and with a bar of cork stuck on transversely to the under surface of the splint, so as to project at the side. Lister's splint, thus constructed, possesses certain important advantages. The hand lies semiflexed, which is its natural position of repose. The fingers are midway between flexion and extension, into which it is necessary to bring them by daily passive movements, while a certain range of voluntary motion is also permitted, which the patient should be encouraged to exercise frequently during the day. Then, again, this position is best adapted for allowing the extensors of the carpus to acquire fresh attachments; and, the palm resting on the sloping surface of cork, the splint cannot slip upwards nor downwards, secured by turns of the bandage around the transverse bar of cork. This appendage to the splint specially keeps the *thumb* in position; it is thus allowed to fall below the level of the rest of the hand, so as to be most serviceable for opposition to the fingers, while the tendency to adduction of the thumb towards the index finger is prevented by a thick pad of lint placed in the angle between the two, under the turns of bandage around the transverse bar of cork. The palmar piece of cork should be hollowed out to receive the ball of the thumb.

After-treatment.—Two principles must be kept in view, in order to obtain a successful result. Firstly, to procure firm anchylosis of the wrist by retaining it in a fixed position, during the process of consolidation, for a period averaging six or seven weeks. Secondly, at the same time, to maintain the flexibility of the fingers and thumb daily; commencing flexion on the second day, whether inflammation has subsided or not. In executing these movements, each finger should be both flexed and extended to the full degree, while the connected metacarpal bone is held quite steady, so as not to disturb the wrist. Both these principles are provided for by the peculiar construction of the splint; and Professor Lister attaches more importance to their fulfilment, in the after-treatment, than to his method of operation.

Pronation and supination, also, must not be long neglected; and as the new wrist acquires firmness, flexion and extension, abduction and adduction, should be occasionally encouraged. The period during which passive motion should be practised may be resolved into this rule: it must continue until the disposition to contract adhesions finally ceases—a few weeks or a few months.

When the patient leaves his bed, and carries his arm in a sling, the weight of the hand will make it gradually droop to the ulnar side—a tendency which is best counteracted by affixing two ledges of gutta-percha to the ulnar side of the splint, one to support the border of the hand, and the other to prevent any lateral shifting of the splint. As the hand acquires strength, more free play for the fingers should be allowed, by cutting away the splint up to the knuckles, leaving only the palm supported. Some support must be continued until the patient feels the wrist as strong without it as with it. Earlier disuse of this support would assuredly undo the work of previous management, and lead to an unsuccessful result. A year, or even two, of such finishing-off support may be required to gain the most useful hand.

Results.—Fifteen cases of wrist-excision are recorded by Mr. Lister as having occurred in his own practice. Of these cases 12 were successful, recovery taking place, and with a hand more or less completely useful in its varied movements of the fingers and thumb, and with combined strength and flexibility of the wrist. In one case the result was doubtful at the time of the report—four months after operation. In the remaining two cases death ensued, though not directly from the operation; one patient dying at the end of seven weeks from advanced phthisis and other complaints; the other patient, after re-excision about six months subsequent to the original operation, lived yet two months longer, when death occurred from phlebitis and pyæmia. Secondary hæmorrhage, or any other bad symptom immediately referable to the operation, occurred in not a single instance.

Thus, then, Lister's elaborate method of operation has been singularly safe and successful.

Other and simple methods of operation have hitherto rarely proved successful, the results having been, in the majority of the few instances recorded, either a stiff and useless hand, or recurrence of the disease and secondary amputation.

Yet it may fairly be doubted whether the superior results

* This operation was fully described in these Lectures, from the original communications by Prof. Lister in THE LANCET.

attained by Lister's method have not been due—as he himself acknowledges—more to the principles on which the after-treatment was conducted than to the plan and performance of the operation. This conclusion seems to be established by two significant facts in the history of Mr. Lister's cases—that the period of recovery and the resulting condition of the hand were about equal in his earlier and later cases, while the method of operation was different.

Author's Collection.

Royal Infirmary, Edinburgh; period, 1865–69. (Per Mr. P. H. Watson.) Number of cases, 12; recoveries, 9; deaths, 3.

Liverpool Royal Infirmary; period, last five years. (Per Mr. W. J. Cleaver.) Number of cases, 6; recoveries, 6.

Chalmers' Hospital, Edinburgh; period, last six years. (Per Mr. P. H. Watson.) Number of cases, 5; recoveries, 4; deaths, 1.

London Hospital; period, last five years. (Per Mr. J. McCarthy.) Number of cases, 3; recoveries, 2; deaths, 1. Amputation after excision, 1; recovery.

King's College Hospital; period, last five years. (Per the House-Surgeon.) Number of cases, 3; recoveries, 3.

St. Thomas's Hospital; period, 1866–70. (Per Mr. F. Churchill.) One case; recovery.

St. Bartholomew's Hospital; period 1866–70. (Per Mr. Callender.) One case; fatal.

Royal Free Hospital; period last five years. One case; recovery.

Guy's Hospital; Westminster Hospital; Charing-cross Hospital; St. Mary's Hospital; Great Northern Hospital; Royal Albert Hospital, Devonport; Royal Sea-Bathing Infirmary, Margate: period, each last five years. No cases.

HAND.

The Hand may often be subjected very advantageously to various operations of excision, both in regard to the metacarpal bones and the phalangeal bones of the fingers. The conditions of disease appropriate for excision are precisely analogous, with respect to any such operation on these bones of the hand, to those of the corresponding bones of the foot. The articular ends, or the whole, of several or of single bones of the metacarpus, or of the fingers, may be thus removed; instead of having recourse to amputation of portions of the hand, which would unnecessarily include sound portions of this precious member. But the choice of either operation of removal, and the plan and performance of the procedure, must be determined by the kind and extent of disease in each particular case. The general principle here again applies: Pathology is the guide as to the excisional operation, whereby also the portion of the hand which may be preserved is indicated.

Time, Sir, is no man's servant, and it warns me that I must conclude these lectures. Yet I may be permitted to advert to the circumstances which originally turned my attention to the preservation of the integrity and fair proportions of the human body. Years—alas, too many—have elapsed since first I heard the dull heavy thud of a wooden *leg*—so termed, as if perpetually to remind the wearer of the irreparable loss he had sustained. Years have passed since first I felt the touch of a black-kidded wooden *hand*, and spied the dark hole into which a pocket-fork was thrust when its wearer sat down to dinner. The shudder I then experienced at such sights, sounds, and contact, I even now feel whenever my natural instincts are thus affrighted. I care not even how long or how short the natural limb, as left by joint-excision, may be—it is still flesh and blood, and warm with the pulses of life.

I have now to thank—always a grateful duty—the Fellows of this time-honoured Society, and the visitors, many of whom will, I trust, soon acquire the former title, for their really large attendance, and for the attentive interest they have evinced in the great aspect of modern surgery which I have endeavoured to elucidate and to advocate.

AT the recent examination for twelve open scholarships at Winchester, 111 candidates competed. The son of Mr. Watkin Williams, the General Secretary of the British Medical Association, gained the honourable position of fourth in the successful list.

ON THE TREATMENT OF HYPERPYREXIA,

AS ILLUSTRATED IN ACUTE RHEUMATISM,

BY THE EXTERNAL APPLICATION OF COLD.

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(*Concluded from page 287.*)

THE extent of the reduction of temperature by the bath demands, I believe, some precaution on the part of the practitioner. I need not repeat the details already given; but it will be observed that, in both the baths given to Mrs. B——, the temperature fell considerably—in the first from 103·6° to 97·4°, and in the second from 103·9° to 99·4°—after her removal from the bath. The same effect was also observed in every bath given to Allen C——, with one exception, occurring on the fourth day of treatment, when the bath failed to reduce the temperature to the normal standard; at least no material fall ensued after his removal from it, though this effect was observed after all the others.

It may be noticed in Allen C——'s case that, with the progress of time, the pyrexia appeared more persistent, and was less influenced by cold. In Mrs. B——'s case the application of the ice-bag was alone sufficient to maintain the temperature at a very moderate elevation after the first twelve hours, and after her second bath. In Allen C——'s case the ice-bag also at first produced a similar effect, but gradually appeared to lose all power in this direction; but, under these circumstances, the ice-cold pack continued to answer this purpose, though it required very prolonged applications of twelve and fourteen hours' duration, changing the pack repeatedly during the later days of the treatment. A similar gradually increasing resistance to the effects of the cold was observed in the fatal case before recorded.

Cases evidently differ largely in the intensity of the pyrexia in this respect. In Dr. Meding's case—a female, aged twenty-two—the application of ice-cold cloths to the body, together with enemata of iced water given every half-hour, reduced the temperature in five hours from 108·6° to 99·5°, and the pulse from 140 to 72; and no further rise ensued. The patient then perspired freely, was able to sit up within two days, and recovered without any relapse.

As a general rule, it would appear that when the rise of temperature is rapid, and it has already reached a high standard, the use of the cold bath is the most certain and speedy means for its reduction, but that it requires care for its employment; that when these indications are less strongly marked, the ice-bag to the spine may be employed; but that when the pyrexia is persistent, the sustained use of the cold pack may suffice to maintain it at a moderate standard. In the absence of appliances for complete immersion in cold water, Dr. Meding's method of employing cold enemata, frequently repeated, may also prove of value.

It became a very difficult question to decide, in Allen C——'s case, when it was safe or desirable to discontinue the artificial reduction of temperature. In fact, I felt that it required almost more courage to abstain from this treatment, while so much pyrexia persisted, than to commence it. Feeling that any material rise of temperature must greatly reduce the patient's strength, it was my object to maintain the pyrexia at as low a standard as possible. The prostration induced by the high fever is evidence sufficient how soon the strength might be exhausted by a repetition of such attacks; and Allen C——'s case certainly appeared to threaten this by the rapid rises of temperature which were more than once repeated when the cold applications were discontinued.

It may probably require further experience to determine at what period of cases, where pyrexia still remains, it is safe to omit the cold applications. Perhaps the reappearance of perspiration may hereafter prove to be a sufficiently favourable indication in this respect. In Allen C——'s case, however, the temperature rose to 105° after this had occurred on the third day of treatment, but it ceased to manifest this tendency in a marked degree after free perspiration occurred on the seventh day. Dr. Meding's patient perspired freely as soon as the temperature had fallen. If the

perspiration is free, and the rheumatic affection reappears in the joints, these are, I think, still more favourable signs; for in their absence—whether or not we regard the poison as localised by the joint affection—its violent effects on the system are certainly more apparent than in their presence. In Mrs. B——'s case the return of the joint affection was very slight; in that reported by Dr. Meding it did not occur at all; but in Allen C——'s case the rheumatic joint affection became very distinct coincidently with the improvement of the patient. The mode of appearance, indeed, of the perspiration in these cases is remarkable, and deserves attention. We usually consider that it is a process by which the temperature of the body is partially equalised, especially when it is exposed to unusual external heat; and its spontaneous cessation in rheumatic fever is commonly associated with a rise of temperature, though it may be observed when this is comparatively high, as 104·5° or 105°. In most febrile affections, however, perspiration occurs most freely when a natural fall of the temperature is taking place, either in the periods of remission of continued fevers, or in the commencement and during the progress of the remissions of ague, or, as is still more strikingly seen, in the first period of apyrexia following the crisis in acute pneumonia. The peculiarity, however, of these cases is the sweating that takes place when the skin is artificially cooled. It generally appears during the first period of the rise ensuing after the cooling by means of the bath or other applications has reached the lowest point. Thus in Mrs. B—— it was seen within the first fifteen hours, four hours after the second bath, when the temperature was 100·7°. In Allen C—— it first appeared forty-four hours after the first bath and two hours after the removal of an ice-bag, when the temperature was 101·2°; and again on a second occasion, five hours after the removal of the ice-bag, when the temperature was 103·4°; but on a third occasion it appeared one hour after removal from a bath, when the temperature had reached its minimum (99·5°). It was, however, also seen on the face while the patient was enveloped in an ice-cold pack, and the temperature in the mouth was 101·6°, though it was more abundant after the pack was discontinued. In Dr. Meding's case it was observed after the first fall of temperature, and when this had reached 99·5°.

It is evident, however, that the treatment by the cold bath must not be looked upon as a curative agent for rheumatic fever as such, but only as a means of averting one of its accidents. In both Mrs. B—— and Allen C——'s cases the rheumatic joint affection returned, together with sweating and continued pyrexia. In Allen C——'s case this was of some severity; in Mrs. B——'s case it was very slight. In Dr. Meding's case it was, however, not observed at all. It is, indeed, possible that the rheumatic poison may in some cases be finally metamorphosed or exhausted through the intensity of the pyrexia and the rapid destruction of tissue. In Dr. Meding's case the hyperpyrexial attack appears to have occurred about the ninth or tenth day of the disease, when the termination of acute rheumatism in perfect recovery is comparatively rare; but in Mrs. B—— the joint affection returned after twenty-six hours, and in Allen C—— on the ninth day, and only ceased in his case on the twenty-eighth day after this treatment was begun, or on the forty-fifth day of the disease.

I believe that these cases afford a pretty clear proof that, with the precaution before alluded to respecting the rapid effect of the bath in the reduction of temperature, this treatment involves no specially dangerous consequences. It is true that Mrs. B—— had an attack of bronchitis, passing, indeed, into broncho-pneumonia, on the fourth day subsequent to the first bath, and some may be inclined to think that this was a direct consequence of the external application of the cold. I am, however, disposed to regard this connexion as extremely doubtful, and to believe that this attack was one of the accidental phenomena incident to the disease itself, and not caused by the treatment. Intense pyrexia largely predisposes to congestion of the lungs, and pneumonia or broncho-pneumonia is a common complication of nearly all the acute febrile diseases, as was, indeed, noticed by Laennec, and is by no means rare in acute rheumatism. The invasion, also, of generally disseminated moist râles throughout the lungs shortly before death, similar in character to those which appeared in Mrs. B——'s case, has also been observed in some of the fatal cases of this nature. However caused, they disappeared almost entirely while the treatment by cold application was still continued—a fact which is of considerable importance in estimating its safety. The cardiac complication, also, which in Mrs. B——'s case was comparatively slight, was in her not only not aggravated, but positively improved, during the same period.

Still more striking in this respect is the evidence afforded by Allen C——'s case how little the most serious complications can interfere with the general utility of this treatment. He had a double pleuro-pneumonia* and a pericardial effusion, producing dulness as high as the second left cartilage, before he was put into the bath. The pneumonia resolved, and the pleuritic effusion almost disappeared, during the period that the treatment by cold was continued. We have learnt from F. Weber's, Bartel's, Niemeyer's, and Ziemssen's observations, that the treatment by cold applications is distinctly beneficial in many cases of pneumonia; and the existence of this complication need not, therefore, be any bar to the practice. There was certainly, in Allen C——'s case, an increase in the pericardial effusion, which at one time reached an alarming amount, during the early days of the treatment; but it also again diminished while this was still persisted in. I cannot feel that this first increase of the effusion can be justly attributed to the treatment by cold. It is too common a complication of the disease to be, I think, regarded in any other light than as a part of its natural tendency and course. Besides, whatever speculations may be indulged on this point, when we look at the alternative between resorting to and withholding this treatment, under the circumstances then existing, I feel that no complications of this nature should stand in the way of its immediate employment. The slight rigors occasionally observed during the fall of temperature do not appear to have been followed by any injurious effects. It may be noted that in one of these, in Allen C——, the temperature was still above the normal standard.

It may perhaps be questioned whether, in future cases, any external warmth may be necessary to prevent too great a fall of temperature. Severe collapse produced by cold has been shown by F. Weber's, Bartel's, and Ziemssen's observations on the pneumonia of children, to be less dangerous than it at first appears.

To some it may appear that the cold sheet has this advantage over the bath, that, its application being continuous, there is less fear of "reaction." I very much doubt, however, whether the rise of temperature following either of these can be regarded in any material sense in this light. If there is such a "reaction," it is certainly long delayed, as is evidenced by the prolonged fall of temperature which ensued after their removal from the bath.

The importance of avoiding the *nimium medicinæ deligentiam* has induced me to consider carefully the subsequent treatment of these cases. I allude particularly to the administration of quinine and of stimulants. Dr. Meding's case, as far at least as is reported, seems to have recovered without any further assistance; therefore it may be a question whether the remedies given in the later stages of both these cases were not unnecessary. This can only be tested by actual experiment; but I believe that both the patients whose cases I have recorded were benefited by the stimulants administered, and I very much doubt whether C—— would have recovered at all without them. For twenty-four hours on the fifth day of this treatment I was hourly expecting his death from exhaustion, while the pericardial effusion was at its height, and I more than once considered the propriety of resorting to paracentesis pericardii, which has been so successfully practised by Dr. Clifford Allbutt of Leeds.

We have long learnt that the administration of stimulants does not increase pyrexia in the acute febrile diseases; and though I by no means think their indiscriminate use desirable, there are circumstances when the largest doses that can be taken may be administered with advantage, and I believe that Allen C——'s case was one of these. The indications for their use in Mrs. B——'s case were also very distinct. However, Dr. Meding's case is a valuable contribution to the history of such cases, inasmuch as the patient recovered rapidly without them; thus showing that they are not invariably necessary.

The value of quinine is, perhaps, more doubtful; I do

* The signs of pneumonia existed before those of pleuritic effusion.

not allude to the first large doses which I gave in order to test its power of checking the rapid rise of temperature. This, as has been seen, failed entirely. My reasons for continuing its use were chiefly four. In the first place, Briquet* showed that the administration of full doses of this drug in rheumatic fever—75 grs. to 90 grs. in the twenty-four hours—had the effect of retarding the frequency of the pulse. In the second, as I have already stated, I had seen the temperature fall under its use in this disease and in other febrile affections; and I thought it possible that, after the intenser paroxysm had been subdued, its effects in this direction might still become apparent. Thirdly, the committee of the Clinical Society, in their report on this subject, have adduced much evidence of its power in this direction in other febrile diseases. Lastly, it has been freely used in Germany in conjunction with the cold bath in the treatment of typhoid fever. I had also thought it possible that the retardation of the pulse, after the first fall of temperature, both in Mrs. B——'s and Allen C——'s cases, might be in some degree due to the large quantities before taken; and I desired, if possible, to maintain this effect. Dr. Meding's case, however, shows that the restoration of the pulse to a nearly normal frequency may occur under the use of cold alone, without the employment of quinine; and I question whether in mine, when the same effect was observed after the baths, any direct effect could be attributed to the quinine. The large dose at first given to Mrs. B—— produced some gastric disturbance; and I think that a minor degree of this complication is to be attributed to its employment in Allen C——'s case. It would therefore appear desirable that future cases should be treated without it, until at least it is seen whether any more distinct indications call for its employment.

In Allen C——'s case the quantity of urine and urea passed during the febrile stage was very large, but both were higher in the later than in the earlier periods of the treatment. Forty-eight hours after the treatment was commenced he passed 109 ounces of urine, containing 527 grains of urea; on the fifth day 191 ounces, containing 767 grains; on the twelfth day 165 ounces, with 894 grains; though on the eighth day 64 ounces of urine only contained 220 grains, and on several days the amount of urea was less than 500 grains.

The quantitative analysis of Mrs. B——'s urine was only commenced on the fifth day after the extreme pyrexia. Subsequent to this day the greatest quantity of urea passed was 433 grains, and it never but once exceeded 350 grains. It is probable therefore that the products of the decomposition of tissue were eliminated in the first four days, during which the patient was, however, still pyrexial.

I may, in conclusion, be permitted to remark that I trust that this treatment may be hereafter found equally successful in other febrile diseases presenting similar phenomena of hyperpyrexia, and in some of the cases of puerperal pyæmia, and even of tetanus. It is a possible accident in the whole class of these affections, and many of those whose duration is definite will probably present a more favourable field for its utility than acute rheumatism, which may, as in C——'s case, be indefinitely protracted, even after the immediate danger of death has been averted; but in the specific fevers, if life can only be protracted and the strength maintained through their natural course, they tend finally to a spontaneous recovery.

I must, finally, express my sincere thanks to my assistant, Mr. Bindley, to my clinical clerks, Mr. Greenfield and Mr. Benham, and also to the Sister Superior and nurses of the wards, for the admirable and intelligent aid which they afforded me during these observations. A large proportion of the records of the temperature, and many notes of the state of the patients, are due to them. The temperature was taken in both cases every half-hour during the day and night, and the accuracy of the observations carefully verified. To Mr. Benham I am indebted for the quantitative analyses of the urine during many days consecutively.

Although two cases of this nature, occurring simultaneously, were a great strain upon the nurses of the ward, I am yet disposed to believe that, with the aid of one or two intelligent attendants, and watchfulness on the part of the medical practitioner, no less success may attend this treatment even in private practice. Though Allen C——'s case was of great severity, yet that recorded by Dr. Meding, which occurred in a servant in a private family, is a proof how speedily recovery may ensue under these hitherto fatal circumstances of the disease.

I believe that when cases of acute rheumatism are more carefully watched with the thermometer than they have hitherto been, nearly all the instances in which it is immediately fatal will be found to be of the class now considered. I have only seen a very few cases where, without an extreme pyrexia, death could be attributed solely to complications existing in the heart and lungs; and I believe that several of the cases proving rapidly fatal which I have seen in the course of my hospital experience have been due solely to this cause, though the temperature has not been in all cases accurately recorded. If the treatment here proposed is as successful in the hands of others as it has proved in mine, I think we may indulge the not altogether vain expectation that its mortality may be materially diminished, at least in one of its most dangerous forms.

* Traité du Quinquina.

PERFORATIONS OF THE MEMBRANA TYMPANI.

BY W. B. DALBY, F.R.C.S., M.B. CANTAB.

(*Concluded from page 258.*)

THE tympanic membrane is liable to be accidentally ruptured in several ways: By violence applied from without, such as a pin or piece of wood, &c., thrust into the ear; a blow or fall on the head, with or without fracture of the skull; an unexpected concussion by a box on the ear, or a loud explosion close to the ear; by violence applied from within, as in blowing the nose vigorously or vomiting. For the most part such accidents are followed by more or less impairment of hearing, even after the rupture has healed. The greatest degree of deafness, however, generally follows when the wound has been caused by a blunt-pointed body used with a good deal of violence. If it is done with a sharp-pointed instrument which makes a clean cut, the opening will in a few days heal, and often without appreciably affecting the hearing. This is an interesting point in connexion with these injuries, as it coincides with what would be expected when comparing the accident with the operation of incising the membrane in cases of tympanic disease. Here an incision of some extent is made, there is considerable difficulty in keeping the wound open, and it will not unfrequently close in two or three days.

H. B——, a man aged thirty-six, had been picking his right ear with a pin; his hand slipped, and the head of the pin went through the membrane, causing him most sickening pain. I saw him four days afterwards, and he was then in a good deal of pain, and had constant tinnitus. There was a small perforation at the upper and posterior part of the membrane, from which exuded a clear discharge. He could just hear a loudly ticking watch four inches from the ear. After the perforation had healed, which it did in six weeks, he was still deaf to the same extent.

A somewhat similar case is related by Mr. Toynbee, in which the chorda tympani was injured. The accident was caused by a twig penetrating the ear as the patient was getting through a fence while out shooting. The hearing, after the perforation had nearly healed, remained very imperfect—half an inch for a watch. A very fragile object is sometimes sufficient to rupture the membrane. Dr. Von Troltsch records two cases in which the injury was caused by a blade of straw. The fact of the tympanic membrane being able to withstand violent shocks, as from forcible pressure of air in the case of a child having a box on the ear, or a violent explosion near the ear, when these forces are expected, was explained by Mr. Toynbee as being due to contraction of the tensor tympani.

The serious effects of unexpected concussions are not confined to the membrane, permanent injury to the tympanum and labyrinth often following them. I saw not long ago a boy of sixteen, who had been totally deaf on the left side for some years. A few days before, while he was at play, he received a very sound box on the right ear from another boy, who came up behind him without being seen. The tympanic membrane was ruptured in a line with the handle

of the malleus, and the deafness was very great. He could not hear a loud watch in contact, and required a raised voice close to the ear for conversation. The hearing afterwards did not improve. One case of rupture of the membrane, occurring during a violent fit of vomiting, left very great deafness. This accident happened to a man sixty-three years of age eighteen months before I saw him. He could not then hear a loud-ticking watch in close contact with the ear, and the perforation had not closed. He could still blow freely through it. At the time of the accident he felt a crack in the ear, and it was followed by a little bleeding. This was rather an exceptional case, for, as a rule, ruptures caused in this way heal in a short time, as do also most accidental perforations of the membrane, except those caused by violent force with a blunt instrument. These are often followed by suppuration in the cavity of the tympanum, and are liable to get into the same condition as perforations caused by suppuration behind the membrane; but, speaking generally, they eventually heal. The force used in such an accident may be so great as to fracture the handle of the malleus, and there are on record several cases of this kind. But although with such a complication the hearing will be greatly impaired, it may be equally so when the force used has been considerable, even if the bone is not fractured. Perforations may occur when the ears have been syringed with ill-directed zeal for the supposed presence of cerumen; by this I mean when the operator has syringed the ears without satisfying himself of the presence of cerumen by using a speculum and reflected light.

Oct. 1870.—J. E. A——, aged fifty-three, had always been deaf in the right ear. The hearing of the left ear had been good till two months before. He then suffered from tinnitus, for which the ear was syringed, but without bringing away any cerumen. At the time he had acute pain, which was followed by a good deal of swelling of the meatus, and in two or three days by a profuse discharge. When I saw him he had a discharge and a rather large perforation at the inferior and posterior part of the membrane. The rest of the membrane was covered with granulations. He suffered from constant tinnitus, and could just hear a watch pressed against the ear. Under appropriate treatment the granulations disappeared and the discharge subsided in four weeks, but the hearing and tinnitus were no better. The case was not seen afterwards, so I cannot say whether the perforation healed or not. In any case, however, judging from the ordinary termination of these injuries, when there is so much deafness, it is not likely that the hearing would greatly improve.

As these cases are not generally seen for some days after the accident, it is not always easy to say whether the stream of water immediately ruptures the membrane, or whether the injury gives rise to inflammation which results in a perforation. A healthy membrane would offer very considerable resistance to a stream of water; and I should think that, for the most part, the perforation was secondary. This appears to have been the case with a young lady whom I saw last summer, four days after the ear had been syringed. She said that for the whole of the same day and following night she suffered acute pain; and that in the morning the pain went away, and a discharge appeared. At one spot she could blow through the membrane, which appeared to have given way without any appreciable loss of substance. The discharge was very slight. A watch was heard at six inches from the ear. Air was passed into the tympanum every day on Politzer's plan; and the hearing gradually improved till, after ten days, it was normal, and within three weeks the perforation had healed.

In examining recent injuries of this kind, in addition to inspection, it is well to verify the diagnosis either by getting the patient to blow through the perforation with the nose and mouth closed or by passing air through on Politzer's plan. The treatment will naturally be of the simplest character. If there is any bleeding, the blood should be carefully removed with a syringe; and if there is much pain, two or three leeches should be applied behind the ear and in front of the tragus. This should be succeeded by fomentations till all pain is gone. In case of the rupture not healing in a few weeks, and a discharge being established, the same treatment should be pursued as in perforations which are the result of disease.

Grosvenor-street, June, 1871.

ON THE TREATMENT OF CHOLERA.

By T. M. LOWNDS, M.D.,
RETIRED, H.M. INDIAN ARMY.

As it is most probable that we in England may ere long have a visitation of Asiatic cholera, I may be permitted to describe a plan of treatment which I found in India, in a series of years, more efficacious than any other, and it is the only one which in my hands gave any approach to a regular result, or seemed to afford great benefit during the stage of collapse.

I may premise shortly, in reference to the pathology of Indian cholera, that the disease is one which, according to the severity of its type, kills in two ways:—1st. In those cases almost or wholly without vomiting and purging the whole amount of the blood is so "devitalised" or destroyed that death takes place in three or four hours, without more than the collapse stage being manifested. 2nd. The ordinary form, in which the first manifestations are, malaise, internal qualms, followed speedily by purging of the contents of the intestines, then evacuation of the stomach; this is followed in many cases by recovery, but in a great majority of cases by purging and vomiting of the true choleraic rice-watery discharges, succeeded, after a greater or less number of hours, by collapse, in which either the patient succumbs or reaction takes place.

For convenience of reference, I would consider the treatment of the common form of Asiatic cholera under four heads:—1. Choleraic diarrhœa (cases coming early for treatment at a time when cholera is present, but before the diagnostic discharges have come on). 2. True cholera, characterised by rice-water discharges. 3. Collapse. 4. Reaction.

Though I saw a very large number of cases of cholera, I never saw one of the exceedingly rapidly fatal cases; but that they occur is well known, though it is scarcely to be expected that any treatment should avail, any more than it would were a large dose of a quickly acting poison injected into the blood, and no treatment applied until its effects were fully developed.

In the second kind of cholera, choleraic diarrhœa, or what I have called the first stage of cholera, is especially amenable to treatment. In India I always found the stomach and bowels so completely emptied of their contents that these patients were quite prepared for the administration of a draught containing a stimulant antispasmodic combined with opium. The medicine I generally used was ten to fifteen drops of chloroform with about the same or a greater amount of laudanum, dissolved in three or four drachms of brandy or arrack, and given either in plain water or preferably in an effervescing draught. As a general rule, one dose of this mixture was sufficient to control the diarrhœa, and the patient returned to his bed and slept, usually waking quite well. The dose might be repeated, if necessary, every two hours or more frequently. This is the plan I pursued, and it was successful; but I have not the least doubt that any stimulating sedative would act well; in fact, the experience of various remedies in India has proved this.

When the disease has progressed to, or come under notice in, the second stage, opiates were far more sparingly used, a dose or two of calomel given, and sinapisms applied to the abdomen; a drink, consisting of one drachm of chlorate of potass with eight or ten drops of strong muriatic acid and one or two drachms of dilute nitric acid, to twenty-four ounces of water, was also given, in one- or two-ounce doses, at the will of the patient. The pulse, if this stage continues for any time, speedily becomes weak and very rapid. As soon as the rice-water discharges appeared, I generally ordered two ounces of Liebig's cold soup* every half-hour.

In the third stage, or that of collapse, all medicine except the cold soup and the chlorate of potass drink are discontinued.

* Made by digesting eight ounces of raw lean meat, finely minced, in twenty ounces of cold water, to which eight or ten drops of strong muriatic acid and a little salt had been added, for a quarter of an hour, and then straining. This soup will not keep more than a few hours on a hot day.

Of the fourth, or stage of reaction, little need be said. In the treatment of it we must be guided entirely by general principles. Since I treated cholera as I have sketched it above, I have not seen a single case of consecutive fever. The last case of after-reaction that I treated in India was one of great turgescence of the fauces and larynx, with blood-spitting; it was treated simply, and did well.

My experience of the effect of the cold soup, first used in consultation with Dr. J. Ogilvy, now of H.M. Artillery, dates from 1860, when it was administered to an officer of H.M. 33rd in commencing collapse, which ceased after twelve or fourteen hours, and the patient did well without any consecutive affection except a smart attack of gastritis, easily subdued. In the next few days two other cases occurred; one was collapsed for twenty-four hours, the other for three days. These two cases were admitted at a stage too late for opium and stimulants; both did well. The first two doses of the soup I have seen change the entire aspect of a case, from pinched features, choleraic voice, cold skin, and uncountable pulse, to a state of comparative comfort. The pulse, though thready and very quick, was countable, and the eyes were not so sunken. Yet the choleraic rice-water discharges and the absence of urine continued for three days. I have never seen the soup vomited, or cause an inclination to vomit. One patient, before reaction took place, said he much disliked it, and begged for sago, which was given him, but it instantly occasioned vomiting, and he gladly returned to the red-looking soup. The soup may be administered too largely. In one very severe case a portion was passed per anum coloured as it was taken. On inquiry I found that large doses had been given to this patient, a boy of thirteen, by his friends, as he derived so much benefit. The doses were reduced, and the stools resumed their former choleraic hue. I have never seen the sweating occur that so generally accompanies collapse. In fact, the soup seemed to increase the strength of the pulse and restore the heat of the body in some cases, of which I have notes, as much as three days before a drop of urine was passed, and yet I felt assured that the patients were doing well. Usually from three to four distinct cholera stools were passed, and sometimes the patients vomited as often during the twenty-four hours; this was before micturition was restored. In one case a healthy bilious motion occurred on the third day from the commencement of collapse, and was followed by a renewal of the rice-water discharges for twelve hours, yet without any appearance of hurt to the patient's general state. A marked feature resulting from the use of this aliment was that the patients commonly slept some hours each night. They were of course entirely confined to the recumbent position as soon as the second stage supervened.

Of the action of the soup little need be said, and almost all that is required is summed up in a remark made to me by Dr. Ogilvy when discussing the results of the first two cases in which it was tried—viz., that the soup seemed to supply to the blood exactly what the discharges had removed. I believe the cold soup to be infinitely superior to Liebig's extract, for it contains all the elements of the latter in addition to uncoagulated albumen, and, like the extract dissolved in water, it passes into the vessels of the stomach without any digestion whatever, but only by absorption. I believe it simply affords to the blood power to battle with the disease, and supports it while the poison and its products are eliminated from the system.

The chlorate of potass drink I gave under the idea that it might help to oxygenate the blood; and in one case, while the soup was preparing, it was administered to a patient distinctly in the second stage of average severity, who immediately said his stomach was warmed most remarkably; in fact, complete recovery without collapse resulted. Whether, because *post hoc*, it was really *propter hoc*, it is impossible to determine; but in a disease like cholera all are specially apt to cling to a remedy which even in one case has appeared to have a markedly beneficial effect, and to which, even after long trials, no harm can be attributed.

In 1857, in Bombay, I tried, beyond the ordinary nourishment and dry heat then generally used, water saturated with nitrous oxide as a drink. Six patients out of seven (five of whom were in collapse on admission) recovered under this oxygenated water, and the remedy was not administered to the fatal case until twelve hours after admission, as his condition seemed so hopeless. But these cases occurred at the end of an epidemic, so that too much reliance must not be placed upon them; still warmth appeared promoted, and the cases at least settled the point that the oxygenated water was not productive of harm. The cold soup seemed to fulfil a further indication, and very considerable influence on the disease appeared due to the treatment as mentioned above.

The great point in cholera is, I believe, early treatment, and in the first stage nothing is more convenient than the old cholera pill as advocated by Dr. Murray, but I believe its use is strictly limited to the first stage. No medicine in the form of pill should be given after that stage, as pills are especially liable to be ejected with the first efforts at vomiting in the second stage. Should the disease become epidemic, these pills might be extensively distributed for early use before medical aid could arrive.

I may add to these hurried notes that, with proper attention to removal of excreta, I have never seen a single attendant attacked with the disease.

The views of treatment which I have advanced in this article are a *résumé*, with added matter, of a paper entitled, somewhat presumptuously perhaps, the "Rational Treatment of Cholera," in the Transactions of the Bombay Medical and Physical Society for 1860.

Egham-hill, Aug. 21st, 1871.

ON A

NEW AND SAFE METHOD OF PERFORMING ACUPRESSURE.

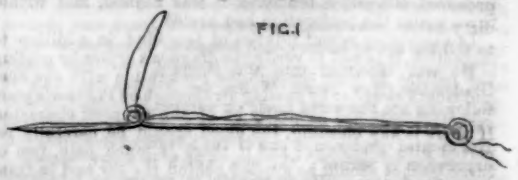
BY R. CLEMENT LUCAS, F.R.C.S.,

LATE HOUSE-SURGEON TO GUY'S HOSPITAL.

IT is now some time since acupressure was introduced at Guy's Hospital; but at the time it was there practised I had an opportunity of observing that it was not unfrequently followed by hæmorrhage, either from imperfect application in the first place, or from the wires and pins becoming loose from some cause, or from attempts made to remove them too soon after the operation. I then contrived the method of securing vessels that I am about to describe, which renders acupressure more simple and quite as safe as a ligature, and has the advantage of being equally certain in the hands of a novice as in those of the most expert professor of acupressure. The subsequent introduction of torsion, and the rapid conversion of all Guy's surgeons to that mode of securing vessels, prevented my drawing attention to it at the time; but finding that acupressure is still largely practised and advocated by surgeons of the greatest eminence, I have thought it right to lay this method before the profession.

An ordinary acupressure needle, having a ring at one end, is twisted so as to form a small loop about an inch from its pointed extremity, or at such a distance as the surgeon may think most convenient, varying with the size of the needle. A piece of fine wire is doubled in the middle as in ordinary acupressure, and the loop thus formed is passed first through the ring at the end of the pin, then through the loop on the staff. After sufficient has passed to reach easily over the point of the needle, the loop of wire should be bent up at right angles so as to be out of the

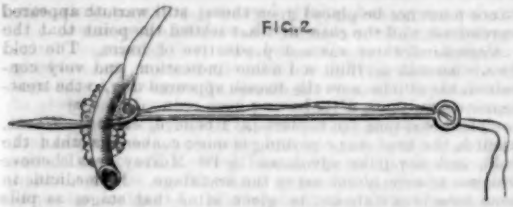
FIG. 1



way, as shown in Fig. 1. In this way needles should be kept ready for use.

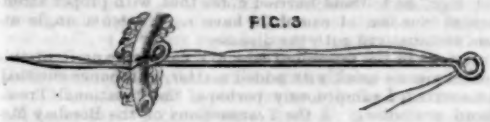
In performing the operation for securing the vessel there are three acts. First, the point of the needle is passed under the vessel, as shown in Fig. 2. Secondly, the loop of the wire is bent down over the vessel and slipped over the

FIG. 2



point of the needle. Thirdly, the vessel is compressed by pulling the free ends of the wire tightly through the ring at the extremity of the needle, and finally secured by bending back the wire at this point, as shown in Fig. 3; or it

FIG. 3



may even be made more safe by giving the ends of the wire a twist round the needle close to the ring.

To remove the pin, all that is necessary is to straighten the wire bent round the ring at its outer extremity; then on gently pulling the pin the loop of wire glides along towards the point and releases the vessel. Should bleeding now take place, the vessel may again be compressed by pulling on the wire, provided that the pin has not been so far extracted as to have allowed the loop of wire to pass over its point. After the pin has been removed the wire follows, as in the mode of acupressure described by Professor Pirrie under the name of "circumclusion."

I venture to claim for the above method the following advantages: 1. That it secures the vessel against all chance of bleeding. 2. That it permits the pressure upon the vessel to be regulated. 3. That, when about to remove the wire, it allows the surgeon to ease the vessel and again tighten the wire upon it in case of bleeding without reopening the stump, which it is not possible to do by any of the methods now employed.

Littlecote Hall, Hungerford, July, 1871.

TWO CASES OF

MEDULLARY CANCER OF THE BRAIN.

BY F. NORTON MANNING, M.D.,
INSPECTOR OF THE INSANE.

THE subjoined memoranda of two cases of medullary cancer of the brain seem to me interesting from a pathological point of view. I am not aware if general experience accords with mine that the pathological condition is a rare one.

CASE 1.—C. W——, age about sixty, a native of England, was arrested by the police at Cooma in New South Wales, being found wandering about, and unable to give any rational account of himself. His previous occupation and the duration of his malady could not be discovered, and the chief symptoms mentioned in the medical certificates for his admission into hospital were: "A vacant, expressionless stare, inability to express himself intelligibly, dirty habits, remaining in one position for hours, inability to tell his age or history, and complete loss of memory."

He was admitted into the Hospital for the Insane, Gladesville, New South Wales, on October 7th, and the following are the notes made on admission. He is a short, thick-set man, fat and flabby, and of a fair complexion. His mental condition is one of far advanced dementia; his expression is vacant; the eye, which is much congested, has a fixed stare. He is unable to return an intelligible answer to the simplest question, but makes silly and inconsequent remarks in a hoarse, thick voice. He walks feebly (but without any paralysis), and requires constant attention to keep him clean, as he frequently passes his water without moving from his seat. Face congested. Appetite good; and he rests well at night.

Oct. 17th.—Seized this morning with complete paralysis of the right side. The mouth is much drawn to the left, and there is external strabismus of the left eye, with fixed dilated pupil. Deglutition is difficult. The breathing is very noisy, especially when asleep. Is quite unable to articulate, but nods his head when spoken to, and seems pleased with any attention.

Nov. 10th.—Has recovered a little power in the right hand, but is unable to move the forearm or arm, and the leg is completely powerless. He takes a fair quantity of food, though with difficulty, owing to the impaired powers of deglutition. The breathing continues extremely noisy. The conjunctivæ are both much congested, and the head is very hot. He emaciates somewhat rapidly.

30th.—Slowly becoming more feeble.

Dec. 1st.—Has had another paralytic seizure. Loss of power is again complete on the left side, and he has sunk into a comatose condition.

3rd.—Died.

Autopsy, eight hours after death.—The scalp was very adherent, and the skull-cap thick; membranes of the brain much thickened, especially on the right side, where they were of a pearly white colour. The arteries at the base of the brain were tortuous and much dilated, but free from abnormal deposit. The white substance of the cerebrum was remarkably firm, and on the right side cut with an almost cartilaginous hardness, although the appearance of the structure was normal. In the left hemisphere were two deposits of cancerous matter. The smaller, about the size of a walnut, occupied the convolutions at the outer convexity of the hemisphere, but did not extend into the white substance, and was firm throughout. The larger, which was about the size of a small orange, occupied the centre of the hemisphere, had softened to a semi-fluid condition in its centre, and was deeply stained with blood. Several small clots also occupied the centre of the tumour. The cerebellum was firm, and the medulla oblongata remarkably hard, and the fibres passing through it very distinct. Portions of the cancerous masses placed under the microscope exhibited all the appearances of ordinary medullary cancer.

CASE 2.—C. W——, aged about fifty, was forwarded to hospital from a station about 300 miles up country, subsequent to the signature of the usual certificates of insanity. The symptoms of insanity were, however, entirely of a negative character, and were all owing to complete loss of sight and hearing. On admission (January 18th, 1871) he was extremely thin, with a worn cachectic look. He was absolutely blind, both pupils widely dilated, the right, however, most so, and quite fixed. There was slight external strabismus of the right. He was absolutely deaf, paying no attention to the loudest sound. The left ear did not seem less affected than the right. When touched or shaken he immediately said, "What is it?" "What do you want?" or "Give me some brandy;" but he never made any remark or exhibited any want except when roused. His usual condition was one of deep lethargy. He would remain for hours in one position, and passed his water and stools under him. He had a feeble, tottering gait, but there was no absolute paralysis, and the sense of touch seemed intact. He took all food given to him readily and with apparent relish. For the first few days he made slight physical improvement, walked somewhat better, and lost a little of the worn look which distinguished him on admission. The cachectic appearance remained, and neither sight nor hearing improved. On Feb. 10th he had an apoplectic seizure, and remained quite comatose until early on the 12th, when he died. It was found impossible to ascertain anything of his prior history, except that the symptoms came on gradually.

Post-mortem examination.—Body much emaciated. The skull was remarkably thin throughout, and in certain spots immediately over the Pacchionian bodies was quite transparent. In three places, one immediately over each frontal sinus, and the third on the vertex, the inner surface was deeply pitted; the thickness was only that of an extremely thin outer table, and it was curiously transparent. The glandulæ Pacchioni were much enlarged, and firmer in consistence than natural, but, so far as could be judged by ordinary inspection and by examination under the microscope, were free from abnormal deposit. The substance of the brain was, both in grey and white matter, firmer than usual. The left ventricle contained a fair amount of serum.

The right contained a small blood clot, and on removing this the whole posterior part of the floor of the ventricle was occupied by a broken-up, blood-stained cancerous mass, which extended through to the base of the brain, and was firmly adherent to the dura mater along the middle third of the ridge of the petrous portion of the temporal bone. The dura mater in this situation was deeply blood-stained, but the growth did not extend to the bone. Neither the optic nor auditory nerves were implicated in the tumour, but the seventh nerve of the right side was quite adjacent to it. The vessels of the brain were much congested. The tumour, under the microscope, exhibited all the appearances of ordinary soft cancer.

Gladesville, near Sydney, N.S.W., Feb. 1871.

TWO CASES OF PUERPERAL CONVULSIONS,

TREATED BY MANUAL DILATATION OF THE OS UTERI AND INSTRUMENTAL DELIVERY; RECOVERY.

BY E. HOLLAND, M.D. LOND., F.R.C.S.E.

IN the course of the year 1869 it was my professional fortune to be called upon to treat two cases of severe puerperal convulsions in the duration of one week, and as there were certain peculiarities attached to each, some novelty in the treatment adopted, and in each instance a good recovery, I regard their brief announcement to be as desirable as it must be interesting.

CASE 1.—A tall, full-fleshed, rather ruddy, and tolerably vigorous rural primipara, the subject of aortic regurgitation and some hypertrophy of the left ventricle, with habitual constipation and albumen in the urine, was suddenly seized with epileptic convulsions, about the middle of the seventh month of her pregnancy, after a few hours' premonition of hazy vision, headache, and incipient labour pains. The convulsions were very severe, recurred at intervals of ten, fifteen, or twenty minutes, and were followed by insensibility and coma. The rectum was full, the os uteri massively thick, and open to the extent of a shilling, but the presentation could not be decided upon. The pulse was enduringly quickened, and forcible. An enema of gruel, containing an ounce of castor-oil and a flavouring of turpentine, was prepared with despatch, and administered after about a pint of blood had been drawn from the arm; the bladder was emptied by a catheter, the hot head had cold water applied to it, and the legs were wrapped in turpentine stupes. After the bleeding there was no fit for twenty-five minutes, and during this interval a piece of deal was placed between the teeth. The fits now recurred every ten or fifteen minutes with the pains, and were equally severe and prolonged, whilst the intermediate coma, if anything, deepened, and left scarcely a shadow of hope that she would recover. An anxious hour or so still passed, during which the convulsions were decidedly severer and more prolonged, and something was to be done. I now determined to introduce my hand (a small one) into the vagina, and to dilate the os uteri (now but little altered) by introducing finger after finger, until I could work in the hand, turn, and extract. After about an hour's manipulation of the os, I succeeded in getting in the hand, and no sooner was it there than it came upon the fœtal feet, which were seized, and the extraction cautiously proceeded with, both during the pains and their intervals. As the shoulders came along, much caution was used to sweep the arms from the grasp of the uterus, and when all but the head was released from the uterus the latter became forcibly contracted upon it and round the fœtal neck. As the convulsions recurred, the uterine action was more powerful than I ever experienced; however, in the intervals of the seizures I contrived to insinuate my fingers and perforate the head behind the ear, and then, by very protracted efforts, effected its delivery by the conjoint use of the blunt hook and the fingers of the right hand. As soon as the child was delivered the convulsions ceased, and never returned. A comatose state continued for some ten or twelve hours, but yielded to a large blister on the nape; and, excepting hazy vision and occasional headache, she made an uninterrupted and speedy recovery, with no indication of uterine injury, and, quickly becoming pregnant again, miscarried about the eighth month, without convulsions.

CASE 2.—A short, slim, and pale multipara, aged forty-two, with mitral reflux and albuminous urine, was suddenly seized, about the seventh month of pregnancy, with epileptic convulsions, after having been reduced to a state of incipient collapse by a severe attack of diarrhœa. When visited, the head was cool and perspiring, the legs and feet cold, and the pulse quick and feeble. There was a convulsive seizure about every ten or fifteen minutes, and a semi-conscious state in the intervals. A vaginal examination revealed the fact that labour had commenced. Altogether the case was as disheartening as any case could well be; but, fortified by my recent experience of the preceding case, I ordered hot bottles to the feet, turpentine stupes to both legs, and brandy-and-egg mixture to be cautiously smeared over the interior of the mouth. I watched an hour or so, and matters got worse. I then resolved to dilate the os uteri, as in the preceding case, and deliver by perforation or otherwise as quickly as possible. After an hour's digital manœuvring, I effected an entrance of the hand, and found a head presenting. I then immediately perforated; but, after the escape of the brain, I had to remove the skull-cap piecemeal before I could get a firm hold. At last, however, after many a slip, I got a purchase on something, which turned out to be the clavicle, and by it I extracted a small female child of seven or eight months, drawing the uterus down, however, to the very outlet, where its retirement over the fœtus could be seen. The placenta followed; but, to mend matters, I now found there was a second fœtus in the uterus. However, as there had been no fit for a good twenty minutes, and no additional complication, I let well alone (having always derived advantage from that maxim), and watched. Presently there was a strong pain or two, and the second child, enveloped in its membranes, and with its placenta, was expelled *en masse*. The patient had no more fits, took an opiate, and made a very rapid and complete recovery.

Both these cases were severe. Both were treated on general principles as far as the bodily health was concerned. In both the fits recurred with increasing violence, and their intermediate coma deepened, despite every general measure. In both cases the os uteri was dilated from a very small size by the introduction of finger after finger; and in both instruments were freely used during an operation of several hours. In neither case was there any consideration to be given to the child, it being premature, and well known in the majority of such cases to be born dead. In neither case was there any fit after complete delivery of the child, or any indication of uterine injury; but, on the contrary, a rapid and good recovery. And, as each case formed the opposite end of an associated series, they will bear to be reflected upon, notwithstanding the sweeping condemnation some might feel disposed to inflict on every procedure that deviates from the groove of *ex cathedrâ* practice.

Titchfield-terrace, Regent's-park, Aug. 1871.

Foreign Hospital Reports.

HÔPITAL ST. LOUIS.

M. GUERIN'S NEW METHOD OF DRESSING WOUNDS.

DURING the siege, the Paris surgeons were much grieved and disappointed at witnessing the utter failure which attended the attempts at amputation and disarticulation, or the liberal use of the knife in any manner. In such cases a fatal result was almost sure to ensue, whatever the mode of dressing employed; and the surgeon was at a loss to discover what means to resort to for saving the patient's life. Attempts at conservative surgery were crowned with much comparative success; still the general results were very unsatisfactory, and the wits and abilities of the Paris surgeons were stretched to the utmost in their search after some safe mode of proceeding. It was quite obvious that the unsatisfactory character of all general hygienic conditions—the want of proper food, the moral state of the

patients depressed and disturbed by the events and emotions of the time, and the bad condition of the atmosphere—combined to entail this heavy mortality. The character of the wounds was also far more serious than had ever been observed under like circumstances; and the injuries inflicted by the cone-shaped bullet (tearing up the soft parts, splintering the bone in all directions, and causing extensive contusion of the marrow) necessarily brought on most disastrous consequences. The results of private practice were scarcely more favourable than those obtained in the wards of the hospitals; and this was observed to be the case as much during the reign of the Commune as during the German siege.

Towards the end of the Communal *régime* M. Alphonse Guérin, who had been previously much struck by the statements advanced by Pasteur, Tyndall, and others, in regard to the dust and germ theory of disease, bethought him of applying a new mode of dressings founded on these doctrines. The starting-point of his inferences and experiments was simply the filtration of dust and germs through cotton, as illustrated by Tyndall's experiments. His first attempts were attended by moderately favourable results, but he has since completed and perfected his system with a success which deserves the attention of surgeons.

The *modus operandi* is extremely simple. It consists, if we take the dressing of an amputation for example, in wrapping the stump round and round with successive layers of cotton. A liberal use of the substance must be made, and several yards of cotton wool successively disappear around the limb. It is quite obvious—to speak in the words of the surgeon of St. Louis—that the thick interposition of clothing is requisite to filter the air before it reaches the wound. It is not the less necessary to extend this dressing in all the directions of the limb, as foul or unfiltered air might find its way to the injured part. Thus, in amputation of the thigh, thick layers of cotton wool are carried up to the hip and around the waist and the nates, so that all the approaches to the wound are carefully guarded in every direction. Coupled with this, M. Guérin exerts a gentle pressure over all the enclosed parts by means of ordinary cotton bands—a point to which he attaches great importance, as it enables him to tighten the whole appliance and to keep the parts snugly together.

This constitutes the entire proceeding. It may be observed that M. Guérin does not use carbolic acid in any way whatever. The wound is simply washed with camphorated alcohol after the operation. The surgeon's hands, the sponges, and instruments undergo no kind of preparation before the operation. The cotton wool and cotton bands are steeped in no fluid.

M. Guérin lays great stress on the importance of carefully watching this dressing, which it is interesting to observe is intended to be a permanent one. He watches the dressing day by day, and never takes it off unless some extraordinary circumstance occurs, but contents himself with adding fresh layers of cotton-wool if he observes that it is in any way disturbed in such a manner as to permit of the introduction of unfiltered air into the wound. Thus the dressing may remain *in situ*, and does so in the great majority of cases, for twenty-five or thirty days. On removing the dressing after this lapse of time a healthy granulating surface is discovered, and half a wineglassful of healthy pus is found within the folds of the cotton. It may here be stated that M. Guérin, on applying a first dressing, stuffs up the stump with cotton-wool, which he introduces beneath the flaps. The process of granulation gradually drives out the cotton, and cicatrisation takes place perfectly. Moreover, this mode of dressing may be applied, and has been with great success, to extensively abraded and burnt surfaces.

Such are the details of M. Guérin's proceeding; and the results which have attended it—to be noticed presently—are deserving of much attention, if we consider the mortality which habitually follows such operations in Paris, and which was especially formidable during the two sieges, and if we also take into account the fact that almost all M. Guérin's operations were for gunshot injuries.

M. Guérin has been exceedingly kind in taking us over his wards, in explaining the details of his procedure, and in stating the opinions he has formed on the subject. We were able to assist in his operating theatre at the undressing and redressing of four cases—a tedious process, which he might have deferred for several days, but which he very kindly carried out for the sole purpose of our benefit and instruction. Before entering, however, into a description of what we witnessed, we cannot do better than transcribe the following important statistical account of all M. Guérin's cases, for which we are indebted to M. Raoul Hervey, house-surgeon to M. Guérin.

"The patients subjected to this method of dressing may be divided into three categories,—the first including inexperienced attempts, the second that of progressive amelioration, and the third that of definitive perfection, which commenced after the collapse of the Commune

"In the first category are to be found one amputation of the thigh, four resections, one disarticulation of the shoulder—in all six patients operated upon, of whom three died. The patient whose thigh was amputated died on the twenty-fifth day, through secondary hæmorrhage which was unavailingly combated by general and local treatment and ligature of the femoral artery. There was no purulent infection. Out of the four patients subjected to resection, two have recovered. In one, the acromio-clavicular arch, in another a large portion of the radius, had been taken away. Of the two fatal cases, one was resection of the ulna. This patient was able to get up on the tenth, eleventh, and twelfth days after the operation. On this last day he was, in compliance with his urgent request, dressed in the wards, where purulent infection was prevalent, instead of in the operating theatre. On the evening of the same day he had a rigor, and a very few days after he died of pyæmia. The other had been subjected to resection of the humerus, and the preservation of the caput humeri did perhaps play a certain part in the unfortunate result which ensued. Lastly, the case of disarticulation of the humerus has recovered; it had been absolutely impossible to find enough flesh for making flaps.

"The second category includes thirty-five patients who underwent large amputations. From one of them the two forearms had to be taken away. Eleven were amputations of the thigh.

"It is to be noticed that among them was a child of five months, for whom no nurse could be procured, and another was a man so completely drained of blood that we feared to administer chloroform: death supervened a few hours after the operation. These cannot, therefore, be taken into account, and, out of the remaining nine, on this day six are doing extremely well.

"Of the other patients, the following (belonging to the same series) have survived: five amputations of the leg out of eleven, four amputations of the arm out of six, two disarticulations of the shoulder out of two, and two amputations of the forearm (including the double amputation) out of four; making a total of thirty-four cases of amputation, of whom nineteen survive.

"Among the fifteen fatal cases were the child already alluded to; the exsanguineous subject; an amputation of the thigh, in which case the post-mortem revealed the presence of no metastatic abscesses; a case of amputation of the leg, and one of the thigh, in which the stump had been manifestly exposed to air in wards which were then poisoned with a purulent infection; two cases of tetanus; an amputation of the forearm in a man aged seventy, and one of a leg, in which the operation was performed too late on inflamed parts.

"As regards the six remaining cases (three amputations of the leg, one of the thigh, and one of the forearm), they were removed from M. Guérin's surveillance to be sent away into other wards or to their homes, and cannot be answered for, as the least disturbance in dressing the parts may lead to penetration of air and fatal consequences.

"To this second series are attached several remarkable cases of conservative surgery. One was a child in which the splinter of a shell had taken away the left buttock, contused the great trochanter, fractured the iliac ridge near the antero-inferior iliac process, and cut down a large portion of the left abdominal parietes, so as to justify apprehensions that the peritoneum was injured. Immediate application of the dressing was made. Symptoms of peritonitis were exhibited during the two following days; but the case is now almost completely cured after three dressings.

"Then may be noted a gunshot wound in the hand, with fracture of two metacarpal bones. Twenty-one days after the first dressing, the necrosed fragments of bone were

found to be completely eliminated. In another case there was abrasion of the whole deltoid with injury to the acromion, in a man of fifty-five years, who recovered. Lastly, three cases of conservation of the foot, where the tibio-tarsal articulation had been more or less injured by gunshot wounds, may be quoted.

"The third and last category includes two amputations of the thigh, and two cases of conservative surgery. These were, first, a wound on the hand without fracture, produced by the explosion of a powder-bag; and, secondly, denudation of the patella without fracture. Both healed very rapidly. One of the amputations of the thigh was a very bad case, complicated by fracture of the femur, open fracture of the clavicle, and a large eschar on the sacrum. Besides that the operation was performed only on the thirty-first day, it was necessary to excise a portion of the femur. Though there were multiple sources of infection, death only occurred eighteen days after the operation, without leaving any traces of purulent infection. The other case was one of a strumous lad, who is now doing well, whilst before the operation hectic had already set in, with vomiting, clammy sweats, &c. The temperature fell from 39° Cent. to 37°."

To this detailed account of M. Guérin's case it remains only to add that the four cases which were undressed in our presence, and which were all doing well, were gunshot wounds. One was a case of amputation of the thigh in a woman aged thirty; another an amputation of the shoulder in a lad of eleven; and two of conservation of the foot, as already referred to in the preceding account. The patients did not complain of heat or pain in the wound. The stumps looked nice and tight, and the surface was either already healed or granulating.

To conclude, some of the Parisian surgeons are already experimenting with M. Guérin's method; with what results is not yet known.

MR. BIRKETT'S LECTURES ON NEW GROWTHS.

Delivered at the Royal College of Surgeons in May and June, 1871.

In his third lecture, Mr. Birkett continued his description of retention cysts, speaking first of those associated with mucous membranes. Obstruction at the orifice of the racemose muciparous glands may cause the dilatation of the secreting part into one single sacculus. Such cysts are especially common in connexion with the labial glands, also on the inside of the nose, the epiglottis, and the pharynx. They contain a very tenacious fluid. Sublingual cysts constitute an important class. Many of them are doubtless mucous cysts; but there are several ducts in this situation, and it is generally supposed that these cysts are connected with them. In one case in which a large cyst existed below the tongue, Mr. Birkett was able to pass a probe along the submaxillary duct, proving beyond doubt that there was no obstruction in it. What is commonly called ranula is, in most cases, only a mucous cyst. The submaxillary duct may become obstructed, but it is usually in consequence of a concretion there, and in circumstances quite different from those in which sublingual cysts are ordinarily developed. In one case of obstruction from concretion there was no swelling in the mouth. Sudden obstruction is attended with great pain; ranula is usually painless. Moreover, in the contents of these cysts Mr. Birkett has never been able to detect a trace of the chemical constituents of saliva; they always contain simple mucus. The word ranula, originally introduced from some supposed resemblance to the neck of a frog, is quite useless and had better be given up.

Another interesting class of mucous cysts are those which develop between the alveolar process of the superior maxillary bone and the lip. They are readily distinguished, and present a peculiar sensation under the finger, like parchment crackling, due to the thinning of the wall of the antrum. Muciparous cysts also sometimes form within the antrum, and these may produce by pressure so much absorption as to show themselves along the edge of the alveolar process, where it is not uncommon to find these swellings. It is probable that some forms of nasal polypus are of a cystic character.

In the neighbourhood of the vagina cysts are very common. They are developed both from the glands of Cowper and from the mucous glands which extend up to the uterus. The labium is a frequent seat and may be enormously distended by one of these formations. Cysts here are often most painful, but their appearance and characters render the diagnosis easy. Higher up in the vagina the posterior wall is the most frequent seat.

Obstruction of the excretory ducts of the breast near the nipple often produces cysts at that part. Many present no difficulty in diagnosis. The contents may often be squeezed out through the duct. Sometimes an elongated distension of a duct is convoluted, and presents on section an appearance as if it consisted of many cysts. They are often accompanied by a new intracystic glandular growth.

The treatment of cysts of this class is tolerably simple. Where practicable, excision should be practised. In the floor of the mouth they often recur again and again and give rise to much trouble. A plan which has of late been adopted with success consists in dividing the mucous membrane of the mouth, making a hole in the sac and stitching that to the submucous tissue, so as to form a permanent fistulous opening and not any longer to allow the cyst to enclose the liquid secreted.

In the fourth lecture Mr. Birkett proceeded with his account of mammary cysts. Simple cysts in the breast, away from the nipple, are, he said, of rare occurrence. They present the remarkable character that the fluid they contain never coagulates by any means we can adopt. It is encircled by a delicate fibrous membrane. Such small cysts are sometimes met with scattered over the posterior surface of an atrophic organ. Mr. Birkett believes that they arise outside the true secreting membrane, in the space, occupied by wavy fibrous tissue and oval nuclei, which lies between this and the limiting cæcal termination of the duct. The fluid contained in them is of a peculiar light-brown opalescent tint, and always very alkaline. When excessively alkaline the fluid sometimes becomes clouded by heat, but becomes clear again on the addition of a little acid. It never becomes turbid with acid only. These cysts occur usually about the middle period of life in all grades of society, in the robust and healthy, but almost invariably in association with some ovarian or uterine disturbance. When these cysts are very tense from fluid, and surrounded by gland-tissue, their diagnosis sometimes presents much difficulty. Fluctuation may be quite imperceptible, but there is always a marked elasticity about them, and not that dead hardness which a solid growth presents. The markedly globular form, and the presence of a distinct line of circumvallation around the cyst, are also distinctive characters.

Another class of retention cysts are those connected with the epididymis. The fluid in most cases contains spermatozoa. Most are doubtless formed from the tubes themselves by a local distension, but some have been thought to be due to the formation of a cyst in the connective tissue underneath the tunica vaginalis, in consequence of the rupture of one of the delicate tubules. Thus, instead of a retention cyst, we should have an extravasation cyst. Mr. Curling has shown that in some of these cases, by passing mercury along the vas deferens and injecting the tubules of the epididymis a certain quantity of mercury gets into the sac, there is reason to think apart from injury. Mr. Paget has suggested that the presence of spermatozoa may be accounted for by the fact of the same vessels traversing the sac which supply the epididymis. At the bedside these cysts are often thought to be ordinary cases of hydrocele. But the outline of the tumour, when of moderate size, is exceedingly characteristic. The distinction between the cystiform development and the testicle shows that the two are not in the same sac, and the axis of the swelling in many cases is not from above downwards, but transverse.

Cysts of the spermatic cord sometimes pass back through the external abdominal ring into the inguinal canal. They occur at a much earlier age than those of the epididymis, and are due to the canal of the tunica vaginalis being obliterated only in part. When they commence later in life they are probably due to local irritation, as from wearing a truss.

Another class of cysts are those which are due to the cutting off of a portion from an existing sac. Thus cysts are sometimes developed in connexion with an old hernial sac; and ganglia are probably of the same nature. Another important group of these cysts consists of those in association with the spinal cord and brain, meningocele, spina bifida, &c. The diagnosis of a connexion with the central organs is often of great difficulty, and an operation in most cases attended with considerable danger. Their congenital character will suggest their nature. Cystic growths on the face in early life are also to be looked upon with suspicion.

Cysts are sometimes connected with bloodvessels. A case of this kind was related. A small cyst, evidently containing fluid, existed on the abdomen of a French medical man, oval in shape, three and a half inches long, slightly discoloured, looking very like fungoid disease just about to come through. A grooved needle was passed in, but only grumous blood escaped. The cyst was emptied thus, but in a few hours it had swelled up again to the original size.

HOSPITAL PROVISION FOR CONTAGIOUS EPIDEMIC DISEASE.

THE public have been taught at least one important practical lesson by the epidemics of scarlet fever, relapsing fever, typhus fever, and small-pox, which have occurred in various parts of the country during the last few years—viz., that the prompt provision of hospital accommodation and the early isolation of the first cases afford the best hopes of checking the progress of the epidemic, whatever it may be. This conclusion having been arrived at, there are several questions of the greatest interest to the public upon which, at present, no very definite opinions have been formed. Thus there is confusion as to the authority which may most conveniently be charged with the duty of providing and administering these hospitals, and the very important question whether the provision should be permanent or temporary, and, if temporary, what the structural arrangements should be. As regards the authorities charged with the duty of providing hospital accommodation for epidemic disease, there is great diversity in law and practice. By the Sanitary Act of 1866 the sanitary authority is empowered to do all that is required, and in some cases, as in Glasgow, they have done so without any distinction of the class of patients received. But, as a rule, when the sanitary authorities have exercised the power of building hospitals, they have professed to deal only with the independent poor requiring removal for want of sufficient house accommodation for the isolation of the patient. Such authorities have generally required a definite payment to be made by the patient or his friends, and although this payment is usually much below the actual cost of treatment, yet it is supposed to constitute a sufficient distinction between the pauper and the independent poor. In practice, however, this artificial line has altogether failed to meet the requirements of the public, and if the sanitary authorities have not made arrangements for receiving patients without payment, they have been compelled to charge the board of guardians for the treatment of those patients who, being admitted under the pressing necessities of the situation, were afterwards found unable to pay the admission fee. Moreover, there is in the Sanitary Act nothing to limit the action of the sanitary authority to any particular class, and no authority to enforce a charge, so that it has been found necessary in many cases to reduce the admission fee, or, indeed, to remit it altogether. It must be borne in mind also that the primary object is to secure the isolation of the patient and the stamping out of the disease, an object which is of far more consequence to the public than the immediate cost of treatment.

But there can be no doubt that the provision of hospital accommodation is also the duty of the guardians of the poor. For many years past the inspectors of the Poor-law Board have been incessant in urging upon the various boards of guardians, both in towns and in the country, the great importance of having isolated wards for the treatment of fever and small-pox. In a vast number of workhouses such provision has been made more or less completely. But there has been a great objection on the part of guardians to erect special hospitals, because it has repeatedly happened that such buildings erected under the pressure of an epidemic have remained empty and unused for very many years afterwards, and in not a few instances the guardians have converted them into infirmaries for the ordinary sick. Nor is this provision by any means generally limited to the admission of the strictly pauper class. An agricultural labourer suffering from typhoid fever would be sent to the workhouse fever ward for treatment notwithstanding that he is in receipt of relief from his friendly society, and is not in other respects in need of relief. But he is removed because he is in the eye of the law "destitute of what to him are the first necessities of life"—viz., ample space and isolation; and the guardians have the full right to inquire into his circumstances, and charge him to the extent of his ability with the cost of treatment.

A large proportion of the admissions into the small-pox hospitals of the metropolis during the present epidemic have been persons not paupers—that is, persons who were not in the receipt of relief before their seizure, and who will not require it after their discharge from hospital. In practice it is found impossible to draw a line as to where the guardians should cease to treat gratuitously and the sanitary authorities should begin to make a charge. And whilst it is desirable that everyone should be required to pay for his own treatment to the fullest possible extent, it is also extremely desirable that no unnecessary pressure should be used, as that would certainly lead to the concealment of disease.

Seeing then that the patients treated in public hospitals are socially so very much alike, and looking at the confusion and inconvenience, not to mention the extravagance, of having two authorities where one would suffice, it becomes a question as to which should be charged with the administration—viz., the sanitary authority or the destitution authority? And we incline to the latter, for the following reasons. In the first place, epidemics usually begin among the pauper class—that is, amongst those who are actually in the receipt of relief, the first cases being discovered by the district medical officers. Secondly, the guardians have the largest amount of permanent hospital accommodation under their control, and if they have not special fever wards they are able to clear out some portion of the workhouse for the immediate reception of the patients. Thirdly, in the event of further accommodation being required, there is generally some yard or open space belonging to the guardians upon which some temporary structures may be raised, and if they have no such site they ought to have. Fourthly, they have always on hand a large available stock of bedsteads, bedding, sheeting, and other furniture. Fifthly, they have at all times a certain staff of paid nurses, and an uncertain number of pauper attendants, who may at once be utilised. Sixthly, they have in their employ a medical staff deeply interested in checking the progress of the epidemic. Seventhly, they alone have officers who are accustomed to inquire into the ability of patients to contribute towards their own support in hospital; and, lastly, the boards of guardians have alone power to recover the payments which it may be considered right to enforce. It is obvious, however, that the union of the sanitary and the destitution authority, as proposed by the Royal Sanitary Commission, will greatly simplify matters, and it only remains that that union should be made as perfect in towns and boroughs as it will be in the rural districts. This can be done by abolishing boards of guardians as a separate power, and by the transfer of their authority to the municipal corporation. In that case, doubtless the Poor Law would be administered by a committee, in the same way as the police, lighting, cleansing, &c., are at present.

We shall proceed to discuss the other questions in a future article.

TERRA DEL FUEGO has been traversed by Lieutenant Masters, R.N., who has discovered that the natives believe in devils, and that they are the departed spirits of members of the medical profession. The main object of their religious ceremony is to keep these devils at a distance from them.

THE LANCET.

LONDON: SATURDAY, SEPTEMBER 2, 1871.

WE have to congratulate Dr. BUCHANAN on the diplomatic skill and administrative energy that he has displayed in endeavouring to promote unity of action amongst the many local authorities theoretically responsible for the sanitary supervision of our great waterway. These authorities are: (1) those of the districts through which the river flows below bridge—viz., the City of London, St. Olave's, Whitechapel, St. George-in-the-East, Limehouse, Bermondsey, Greenwich, Poplar, East Ham, Rotherhithe, Woolwich, Plumstead, and Gravesend; (2) the Trinity Board; (3) the Thames Conservators; (4) the Commissioners of Customs; and (5) the Board of Trade. Dr. BUCHANAN placed himself in communication with all these authorities, and, as will be seen in another column, a meeting of delegates was held at Whitehall on Friday, the 25th ult. This meeting ended by appointing a sub-committee to carry out a system of inspection and general sanitary supervision of the port between London-bridge and Gravesend, the necessity for which was at once acknowledged. The sub-committee have arranged to meet on Monday next at the Guildhall, and it is probable that the medical officers of health for the City and other chief districts will be prepared with a definite plan of action. Indeed, the necessity for such action is more than sufficiently apparent. The unprotected and insanitary condition of the floating population has been commented on over and over again by Dr. LETHEBY in his reports to the Commissioners of Sewers, and much experience of it was gleaned during the ship-to-ship visitation undertaken in 1866 by the officers of the Seamen's Hospital Society. We learn moreover, from a Report on the Hygienic Condition of the Port of London, by Mr. HARRY LEACH, that nearly 25,000 vessels enter and as many leave the port during the year; that there are 2300 sailing and 4000 "dumb" barges belonging to the Thames, and that these latter craft alone represent a floating population of about 15,000 persons. A systematic sanitary surveillance should of course include the docks, of which there are nine on the north and two on the south side of the river; and it must be remembered that the labourers employed in these docks would alone people several good-sized villages. Bow Creek (the outfall of the Lea), Ham Creek, Barking Creek, and Rainham Creek on the north, as well as Deptford and Dartford Creeks on the south side of the river, are all worthy of watchful attention; for small vessels and barges are moored for days together in nooks and corners of these outlets, and their inhabitants take advantage of comparative privacy to indulge in dirt to an unlimited extent. Some supervision, too, may profitably be given to the sewage outfalls at Barking and Crossness. Indeed it is plain that those charged with the sanitary superintendence of the port of London are not likely to find their duties a sinecure. The scheme that Dr. BUCHANAN has so industriously laboured to inaugurate, if taken up and worked out properly and liberally by the local authorities, will accomplish a vast amount of good in preventing the spread of epidemic diseases. We have for many years given prominence to the fact that these diseases are propagated from port to port, and perpetuated to an incalculable extent, by the shipping, and that our insular position as a nation necessitates this condition. Hence it is a primary national duty, as it is undoubtedly a matter of public interest, to look after the health and manner of living of those who dwell on the water, quite as narrowly as of those on shore. This duty appears only recently to have occupied the minds of those interested in sanitary science. But we may record with confidence that the work performed by Dr. BUCHANAN and Mr. NETTEN RADCLIFFE during the past few weeks in connexion with the ports and harbours of England, has as much practical significance, with reference to the health of the population of the United Kingdom, as any inspectorial duties hitherto performed by the Medical Department of the Privy Council.

MOST medical men, we feel sure, have studied with intense interest the important cases lately detailed by Dr. WILSON FOX in the columns of this journal; and to the few who have not read them we recommend their immediate perusal. These papers form the record of a genuine success in positive therapeutics—a success by which a hitherto most intractable and fatal phase of disease has been shown to be essentially curable. During the last few years we have been informed (by WÜNDERLICH, SIDNEY RINGER, MURCHISON, WOLFF, HERMANN WEBER, and others) of a mode of termination to which several acute pyrexial diseases occasionally tend, and in which the occurrence of a certain excessively high degree of temperature, rapidly produced, appeared to be an infallible death-warrant of the patient; in fact, WÜNDERLICH concluded that it was a part of the process of death, for not only did the fatal termination always ensue with great rapidity, but the temperature was observed to go on rising for some time after life had ceased. The phenomenon had been observed to occur especially in acute rheumatism, but also in various other inflammations and fevers, in delirium tremens, &c. Dr. WILSON FOX thinks the balance of evidence from recorded cases shows that any temperature above 108° Fahr., especially if suddenly reached and still increasing, might be said to indicate a surely fatal result, in the absence of the one form of treatment which has now proved successful — the continuous cold-water treatment. Dr. WILSON FOX's cases now recorded are two of rheumatic fever: in one the temperature reached 110°, yet a week later the patient was sitting up in bed and eating fish, and was discharged convalescent three weeks afterwards; in the other, the maximum temperature reached was 107·3°, but it was rapidly rising at the time when it was stopped by the commencement of the cold-water treatment, and would probably otherwise have gone fully as high as in the first case, the general symptoms being exceedingly bad, and the complications most numerous and dangerous. Convalescence was fully established on the sixty-first day.

It happened, moreover, that by a coincidence, of which Dr. WILSON FOX was not at first aware, a foreigner, Dr.

MEDING, had (in 1870) also tried the cold-water treatment successfully in a case of sudden hyperpyrexia, where the temperature had gone up to 108·6°. Additional strength is thus given to the facts brought forward by Dr. WILSON FOX, and there can no longer be any doubt that it is the duty of any medical man who sees a patient reach a temperature at all considerably over 107° Fahr., at once to entertain the cold-water treatment as giving a very hopeful chance for the patient's life.

It would be impossible here to indicate, even ever so briefly, the importance and suggestiveness of this modern confirmation (under the sanction of the most accurate scientific observation) of the old and too culpably neglected doctrines and practice of CURRIE. Since attention was first drawn to these phenomena of rapidly fatal hyperpyrexia in acute disease, much controversy and speculation have taken place respecting the significance of the fact. Was the excessive temperature itself the cause of the fatal result (super-heated blood being poisonous to the life of the nervous centres), or the mere expression of a sudden increase in the violence of the disintegrating processes going on in the nervous centres, which was itself the cause of death? or were both these factors at work? Under these circumstances, the practical answer given by the success of the cold-water treatment is of great pathological as well as therapeutical interest, since it is plain that the mere abstraction of heat was sufficient to change the whole course of the symptoms, and especially to subdue the coma or delirium, which are of the worst possible prognosis. It therefore seems probable that a certain super-heating of blood, producible from causes acting within the body, may of itself cause death. Another thing that is very striking is the total powerlessness of bleeding (as tried in Dr. RINGER'S cases) and of the most powerful drugs to effect the reduction of temperature, which was at once accomplished by the cool plunge-bath, and kept up by other minor means of removing external heat. And even more remarkable is the crucial evidence afforded by the histories of these cases of Dr. WILSON FOX'S that the tendency to grave internal complications—pneumonia, pleurisy, pericarditis—is no whit increased by so seemingly formidable a treatment as that by pailfuls of ice-water repeatedly poured over the body, or keeping the patient immersed for three hours at a time in the cold bath or in the iced pack, such measures being frequently repeated.

Now that we know, not only (as LIEBERMEISTER and others have abundantly proved) that many febrile diseases may be treated, at least as successfully as in any other way, by the cool bath, but that cool baths, cold affusion, &c., are the only treatment for an otherwise inevitably fatal phase of acute diseases, there is one very plain duty before us. Should the results of the treatment employed by Dr. WILSON FOX be repeated in the hands of other physicians, no hospital or infirmary will have the right to remain any longer without the amplest machinery for applying every variety of the cold-water treatment. We may say, emphatically, that this is one of the greatest questions of the day, and it must be immediately followed out in this country by experiments on the largest scale.

THE remarkable impulse which has been given in recent times to the organisation and development of schools for the young, as well as to arrangements for enforcing the attendance of pupils, seems to need, as its natural sequence, an inquiry into the soundness and usefulness of prevailing methods of teaching. In order that such an inquiry may be fruitful, it must be guided by a clear perception of the nature of the work that it falls within the province of a school to accomplish, and also of the character and operations of the organisation with which the schoolmaster is called upon to deal. In other words, it can only be profitably undertaken by those who are conversant with the natural history of mental acts, and with the physiology of the nervous centres. This proposition seems to be self-evident, and to be secure, when once stated, of immediate and universal acceptance.

As a matter of fact, however, the knowledge of physiology on which scientific schooling might be based is only a very recent, and as yet only a very incomplete acquisition. In default of it, the schoolmasters of the past have been compelled to rest almost entirely upon the teachings of their own experience, or upon traditions embodying the supposed teachings of the experience of others. Both have been beset with manifold sources of error, chief amongst which may be placed the natural tendency of every teacher to attribute his successes in great measure to his method, and his failures in great measure to the inherent defects of his pupil. "Given a child with brains," he argues, "and I can do wonders; but if the child has no brains, no one can do anything." It would be quite as fair to argue that the child of great natural gifts might thrive mentally in spite of the teaching; but that the child of average ability would be crushed under it into permanent dulness. Either hypothesis may be maintained as a plausible conjecture; neither has any basis of assured fact on which to rest.

Another circumstance that has probably retarded the growth of any science of education in England, is the extent to which the art has been either practised or controlled by the clergy. It would be equally unjust and unwise to lose sight of the zeal and earnestness with which the work has been prosecuted in their hands; but these qualifications, however valuable, will not wholly compensate for the lack of important special knowledge, or for the maintenance of a low standard by which to estimate results. The clergy have, not unnaturally, fought hard for the inculcation of particular kinds of learning. The result has been that, in the elementary schools, they have too often sacrificed even the little mental cultivation which surrounding circumstances would allow, in order to secure a brief recollection of the sounds of the names of certain villages in Syria. In the higher schools, they have well-nigh ignored the fact that teaching is a difficult art; and have lost sight of the necessary means in their eagerness to attain an end which itself, in very many instances, was not clearly defined. Besides this—among all classes above the humblest—the education of girls has been crippled and retarded by two great evils: firstly, the separation of the sexes during almost the whole period of school life; and next, the extent to which girls' schools have been wholly conducted by single women. In a country like ours, with its

vast disparity in the numbers of the sexes, single women should be spoken of with every possible respect and sympathy, and should be aided in every legitimate way of gaining for themselves an independent position. But they should not on that account be encouraged to enter upon work for which they are almost necessarily unfit; and we hold that the essential incompleteness of a single woman should be regarded as a disqualification for the educational charge of girls. She may satisfactorily accomplish the task of teaching some particular branch or branches of learning; and may be quite harmless to pupils who reside at home. But the boarding school presided over by an old maid is often a prolific source of prudishness that is not modesty, and that is no security for either prudence or virtue; while the limitation of girls to the companionship of their own sex is perhaps the most common cause of hasty and imprudent marriages when the restraints of school are thrown aside.

If we take education in the wide sense of PALEY'S well-known definition, to include every preparation that is made in our youth for the sequel of our lives, it at once becomes manifest that such a process can only be properly guided by a sound physiology, and that its supervision should fall as a matter of right to the members of the medical profession. It is perhaps less manifest, but at least equally true, that the same principle will apply to every part of the preparation, and fully as much to mere intellectual training as to any other. For how is it possible to guide, otherwise than by the most barren rule, an instrument the structure of which is concealed from us? and how can teaching be fruitful, unless it be conducted with constant reference to the nature of the work that we wish to train the faculties to perform? If our ambition be limited to teaching a rule in arithmetic, or a dogma in theology, or a demonstration in Euclid, we may attain to such a humble goal by appealing to the memory alone; and our so-called education will be just so far useful as that it saves the child from utter idleness, and qualifies him to repeat a formula. But if we would help him to calculate, to reflect, or to compare—if we would place him one step forwards on his way to be a philosopher—that is, habitually to refer effects to their causes,—we must first of all try to understand how these mental operations are accomplished, what are the steps which lead to their performance, and what relation they bear to the tasks of school. The need for such knowledge can hardly be better illustrated than by the fact that our empirical educationists have for generations employed the study of languages as their chief means of higher education; while many who are ready—albeit they know not wherefore—to assist in dethroning this idol would fain set up a smattering of physical science upon the vacant pedestal. The faculty of language is naturally entirely sensorial, automatic, or ideo-motor; and the higher powers of the hemispherical ganglia are neither required for its exercise nor cultivated by its study. The smattering of physical science amounts merely to that recollection of what has been said which is so often accepted in place of an inquiry after that which is true. Whenever the day comes at which education is guided by physiology, we shall see a very wide distinction made between things which are to be studied as attainments, for the sake of their practical utility, in the way in which it is easiest to acquire them,—and things which are to be used as means of mental cultivation, as exercises in the difficult arts of observing accurately, comparing justly, and tracing out the links between consequents and antecedents. It will then be recognised that many of our present means of education should be referred unhesitatingly to the former category; while some of our accomplishments—e. g., the art of drawing—will receive a high place in the latter. But before such a reform comes we must go back to first principles, and must understand both why we send our boys and girls to school, and what is the greatest good that it is possible for them to get there.

THE subject of Sewer Ventilation, which is exciting at the present moment so much interest in Liverpool, is one of great importance to many other towns. Unfortunately it lies on the border-line of engineering and medical science, and neither engineers nor medical men have been quite competent to deal with it alone. It is no reflection on the engineers that they should not have recognised the danger of breathing sewer gases in a diluted form, and none on medical men that they were not able to point out the constructive arrangements by which that danger was to be lessened or prevented. "Let every cobbler stick to his last" may be a good old proverb, but it is not always applicable; and when health and construction meet as they do in the case before us, it requires the mutual co-operation of physicians and engineers to bring about a beneficial result. It is to the absence of this co-operation that we owe any difference of opinion on the question of sewer ventilation; and although, as Mr. RAWLINSON says, the design, construction, gradients, and modes of ventilation are matters belonging purely to engineering, we must remind him that the conditions under which sewer gases are formed, the manner of their diffusion, and their effect upon the human constitution, require to be settled before the engineering questions can be satisfactorily dealt with, and by physicians rather than engineers. A brief history of sewers will show how completely the engineers have been at fault.

The main object of a sewer was supposed to be the conveyance of an unpleasant liquid to a watercourse or outfall by a channel out of sight. At that time it was never contemplated that human excrement should be passed into the sewers. In many towns it was expressly forbidden to put into them anything but slops; and the question of ventilation was only forced upon the attention of engineers when, in consequence of the extended use of waterclosets, the air of the sewers became positively dangerous to the men employed in them. About the same time, also, the gulleys, which had hitherto been left untrapped, became excessively offensive to the passers by. A cry came up that all such offensive emanations should be kept below; and, after a few sewermen had been struck dead with the poisoned air, attention was slowly drawn to the necessity of preventing deposits by a better form of sewer, and also of making a sufficient opening in the middle of the roadway. It was also discovered that the health of many towns, instead of being improved by the construction of sewers, actually became worse. Fever broke out in the upper parts

of towns, where it had never appeared before; and as the effects of sewer gases became more generally known, engineers saw the absolute necessity of providing an escape for them. A variety of proposals were made with this object. In some cases the sewers were connected with the rain-spouts; in others with the chimneys of factories; in others with special ventilating shafts: but throughout, the idea of securing the escape of the noxious emanations prevailed over that of providing perfect aëration of the sewers and copious dilution of the gases formed; whilst in the belief of many engineers the emanations were entirely due to the presence of decomposing deposits, which could alone be obviated by good gradients and adequate water-supply. At this time there arose a great controversy between the advocates of large and small sewers. The former provided tunnels of considerable size, capable of carrying away the rainfall on all except a very few days in the year, when violent storms arise. In such sewers it was supposed that the large area would alone suffice for adequate ventilation; whilst the advocates of the pipe-system based their arguments on the ease with which the small pipes could be kept clean, and the relatively small area for the accumulation of sewer gas. Both were wrong in supposing that ventilation was unnecessary; and in both cases it was proved that the emanations from the interior of the sewers were still dangerous. Dr. CARPENTER proved that sewer gas is not always perceptible to the smell; and it is due to Mr. RAWLINSON to say that he appears to have given an early explanation of the true source of danger—viz., in the formation of an offensive slimy substance on the sides of the sewers where they are alternately wet and dry, and this altogether irrespective of any considerable deposit from the sewage itself. This view has been adopted by other distinguished sanitarians; and it appears to us most important that it should be generally known and received, because it involves the application of two essential principles of sewer management—namely, frequent flushing, and adequate ventilation. We have no wish whatever to discuss the constructive arrangements necessary; but we are deeply concerned in the adoption of the principles and in the success of the details. The question of flushing is one of simple common sense. We cannot hope to do it with absolutely fresh water, and we believe that it can well be done by the flow of the sewage if the force be utilised properly. Ventilation is undoubtedly more difficult; but one which it is as much the province of a physician to discuss as of an engineer. It is obvious that shafts are comparatively useless. The area of the largest main sewer is always at least 100 times less than the area of the branches; and to obtain a movement in the latter of two miles per hour, a movement would be required in the former of 200 miles per hour, which, even if there were no openings near to counteract the effect, would be quite impossible.

Well, then, if we desire to have perfect aëration of the sewers, it would seem we must not rest contented with making provision for the escape of the gases formed in the sewers, but we must have numerous inlets as well as outlets; indeed, they should be so numerous that every emanation becomes diluted and neutralised the moment it is formed. The only sound reasons for constructing a sewer underground are: first, because it must be below the level of the cellars; and, secondly, be out of the reach of the sun, which would increase evaporation and promote decomposition. If these conditions could be secured, mere exposure would be as good here as in other sanitary points; for it may be laid down as a rule that daylight is the best sanitarian we have. In the treatment of sewers, keep the golden sanitary rule in force—that the danger of a foul gas is only great whilst it is confined within four walls, and that it practically ceases the moment the gas escapes into the atmosphere. As you cannot get complete exposure, ventilate the sewers fully from end to end; and rely upon it that by doing so the air of the houses will remain untainted. This at least is the conclusion which facts are forcing upon us just now.

AT the London University one hundred and twenty candidates presented themselves at the recent Preliminary Scientific Examination; of whom only forty-three succeeded in passing—eleven in the first, and thirty-two in the second, division. Such a result as this decidedly calls for some explanation. Does the fault lie with the candidates, their teachers, or their examiners? Making all due allowance, a candid consideration of the questions submitted on this occasion cannot but force the conviction upon us that many of the rejections were undeserved, and were the result of a faulty examination.

The young men who come forward to undergo such an ordeal have a fair right to demand of the examiners—1st, that they should state their questions clearly and definitely, without any ambiguity necessitating long consideration to make out their meaning; 2ndly, that they should strictly limit the questions to the subjects set forth in the list of them given in the Calendar; and, 3rdly, that they should avoid the introduction of terms which are *rarely used* and are quite unnecessary, merely with the view of testing the candidates' acquaintance with such terms as present difficulties to the candidate in replying to the questions. For it must be borne in mind that almost all the candidates are very young; are unaccustomed to the "dodges" of examinations; have only had a limited time for preparation, in which they are guided by the Calendar; and that there is usually quite enough given them in the examination-papers to occupy them for the allotted three hours, be the questions ever so clearly and concisely stated.

Now, so far as the papers in Chemistry and Zoology are concerned, these conditions are almost throughout fairly attended to; and they are, on the whole, models of what papers ought to be. It will doubtless be found this year, as in previous years, that it is not in these subjects that so many failures have taken place, as in Botany and Mechanical and Natural Philosophy. It really almost appears as if the examiners in these latter subjects put themselves to a great deal of trouble to find out difficult and puzzling questions; and if we analyse them, it will not seem at all strange that so many candidates have been rejected. In Botany, out of seven questions, one was remarkable only for its ambiguity and tendency to mislead as to its meaning; another could only be answered if the candidate happened to be acquainted with an almost obsolete term, which the majority had probably never heard of, and which ought long

since to have been buried in oblivion. Three questions were more or less beyond what the Calendar demands, and certainly by no means adapted for a pass-paper; while one of these went altogether out of the subject.

The paper on Mechanical Philosophy contained ten questions, which we have taken the trouble to submit to an eminent authority upon the subject—Professor HAUGHTON, of Dublin,—who reports that *four* only are questions which ought to have been asked. The others are questions which could only be answered by those who had read certain particular books, not commonly recommended to students, though brought under the notice of those who have been fortunate enough to belong to the class of Professor CAREY FOSTER, himself one of the examiners. And this brings us to one ground of complaint against the University—that the authorities will give no information whatever as to the books recommended to be read, this information being only obtainable in some cases by entering to the examiner's course of lectures—a proceeding clearly open to animadversion.

The opinions here expressed as to the subjects of Botany and Natural and Mechanical Philosophy are but the echo of complaints made on all hands by the candidates, successful as well as unsuccessful; and they have been endorsed by many who hold high positions as teachers and men of science, to whom the papers were referred. What is the object which the London University has in view? If it is to limit the number of those who receive its degrees, of course the more difficult the examinations are made the better; but if it is only to ensure that those who possess these degrees shall have received a proper education and acquired a proper amount of knowledge, this object can be fully attained by giving fair and straightforward questions, not extending beyond the subjects stated in the Calendar. It is very important to bear in mind the effects produced on those who are unsuccessful at these examinations. Some present themselves again, but have in the meantime been devoting another valuable year to subjects which, after all, will not be of much practical value to them in after-life. Others, vexed and disgusted at what they feel to be an undeserved "plucking," not only give up all further attempts to gain a degree, but not unfrequently become changed from steady and hard-working students into those characterised by indifference, idleness, or vicious habits. Almost all, whether they pass or not, acquire a deep dislike, amounting often to a bitter hatred, of subjects which are in themselves pleasant, attractive, and beautiful.

Medical Annotations.

"Ne quid nimis."

THE FORTHCOMING CAMPAIGN.

THERE are manifestations of great activity in the various departments for the forthcoming military manœuvres. It is well that the new Control Department will have to undergo the test of a sham campaign instead of a real one, for it is, by all accounts, in a state of no little confusion at the present time. The line of demarcation between what is this man's duty and what that man's seems to be anything but well defined. However, the different officials will, we suppose, fight it out among themselves, and learn what is to be done, and who is to do it, in the course of the present month. Fifty water-carts have been made during the last fortnight at the Royal Arsenal, Woolwich. The military force will be composed of three divisions, with a principal medical officer and three field hospitals for each division. The whole of the medical arrangements will be under the superintendence of Inspector-General Lawson. Staff Assistant-Surgeon Moffit, who has given much attention to the subject of ambulance arrangements, will be stationed at Aldershot with the army hospital corps. The new ambulance vehicles, on which a War Office Committee has been long engaged, must by this time have been sufficiently completed to enable them to be put to the test. The ambulance-waggon, stretchers, stretcher supports, and other arrangements for the conveyance of sick and wounded men, appear to be most admirably designed; no detail seems to have been overlooked, but every little contrivance has been provided to meet the requirements of a thoroughly efficient method of transport for wounded men. There is one thing, however, perfectly clear to us—namely, that the ambulance waggons contain many new and ingenious adaptations about which the medical officers and soldiers entrusted with the charge of them require to be thoroughly informed if the waggons are to be, practically, as successful as they deserve to be. Medical officers have long urged the necessity for a corps like that of the Krankenträgers, organised for the special purpose of attending to the transport of sick and wounded and ambulance duties, and there cannot be a doubt that this is an essential feature in our modern military system.

MR. EDWIN CHADWICK, C.B.

AFTER the fashion of a deposed sovereign, or of General Garibaldi—only at much greater length—Mr. E. Chadwick has issued a manifesto. His chief objects seem to be to describe what the General Board of Health would before now have accomplished, if it had been still in existence, in relation to the expected invasion of cholera; and also to denounce the action of the Medical Department of the Privy Council. He is especially severe upon Mr. Simon for taking a holiday at the present conjuncture; and he deals out criticism and censure with no sparing hand. Mr. Chadwick has done good service in his time, and has many claims to be treated with indulgence; but he should remember that the world moves apace, and that knowledge increases. His criticisms, where they are intelligible, only show that he has failed to keep abreast of the sanitary science of the day, or to abandon beliefs which are now known to be erroneous. He should have learnt by this time that the dissensions of professing sanitarians form the chief ground on which politicians justify their own neglect of the public health. Mr. Chadwick's paper will directly assist the Ministry next session in again shelving the subject, so that Parliament may devote itself uninterruptedly to some great question, such, for example, as protection against personation under a Ballot Bill. It is true that some thousands of the luckless ballotters *in posse* will die unnecessarily while their interests are being discussed, but this will be regarded as a trifle. Those most impracticable of all theorists, the self-styled "practical men," will be quite sure that sanitary legislation is impossible, as long as those who call most loudly for the end are still widely differing about the means.

The attack upon Mr. Simon we regard as particularly ungenerous and unjust. The devotion of that gentleman to all his duties is so well known that we need not dwell upon it; and is, indeed, conspicuously manifested by his retention

of office as a hospital surgeon, a position from which a less earnest worker would under similar circumstances have long ago retired. Moreover, he possesses in an eminent degree the most essential qualification for the head of a department, the power of selecting thoroughly capable coadjutors, and of animating them with his own spirit. Mr. Simon's well-earned holiday allows his mantle to fall upon shoulders that are perfectly able to wear it; and his absence will in no appreciable way impair the efficiency of his department. Mr. Chadwick's own experience of official life should at least have served to restrain him from his direct personal attack upon a valuable and meritorious public servant.

THE COMPRESSION TREATMENT OF ANEURISM.

A PAPER read by Dr. Rawdon Macnamara, of Dublin, at the recent meeting of the British Medical Association, on the Treatment of Aneurism by Compression, gives an excellent *résumé* of the method pursued by the Irish surgeons, by which results are obtained which have hitherto not had their counterpart in the practice of British surgeons. The merit of having revived the method of compression, and of having adapted means for its proper employment, is rightly claimed for the Dublin surgeons, among whom the names of Bellingham, Carte, and Tufnell are most noteworthy; whilst to Mr. Todd (the father of Dr. R. B. Todd) is due the credit of having first successfully carried out the treatment so as to effect a cure in 1825.

Dr. Macnamara illustrated his paper by exhibiting the various instruments employed and the modifications made in them from time to time during the last forty years. The first application of pressure was unbearable, because "dead pressure" alone was employed, until Dr. Carte suggested the combination of elasticity with pressure. Then, again, Bellingham pointed out the error of restricting the pressure to one portion of the artery, and hence the modern practice of using two tourniquets. The same surgeon also exploded the mistaken notion that it was necessary to arrest the current of blood through an aneurism in order to effect a cure; whereas a feeble current of blood through the sac is not only desirable but essential. Another error, and one which, we believe, still obtains extensively among English surgeons, is the application of a bandage to the entire length of the limb in which the aneurism is situate. This, however, as Dr. Macnamara pointed out, far from supplementing the cure, actually obstructs it, inasmuch as it interferes with the establishment of the collateral circulation.

The following is briefly the scheme of treatment so successfully pursued by the Dublin surgeons:—The patient having been brought into good general health, and being neither anæmic nor hyperæmic, an elastic compressor is applied to the upper part, say of the femoral artery, a second compressor being arranged some three or four inches lower. The upper instrument is then delicately adjusted so as to control the artery, and just arrest the pulsation in the sac and no more. "A roster of intelligent students is now organised, and to them is entrusted the management of the case. Two are appointed to take charge of the patient for one hour, when they are relieved by two others, and so on during the day, whereby we secure unwearied attention during the period that pressure is kept up; and as in Dublin we visit our hospitals at 9 A.M., the treatment generally commences about that hour, and is continued up to 9 P.M., when all pressure is removed, and the patient is encouraged to take his night's rest undisturbed. Next morning the treatment is resumed, and so on until the cure is perfected."

Dr. Macnamara then pointed out that, though every exertion is made to conduct the case with as little inconvenience or pain to the patient as possible, the occurrence of a sharp pain in the neighbourhood of the knee is looked for as the harbinger of cure, since it depends upon the rapid enlargement of the collateral circulation. Lastly, Dr. Macnamara repudiated, with true national warmth, the idea that Irish surgeons shirked the ligature of important arteries when required, and attributed their success by the compression method, to (1) faith in the method; (2) national pride in its success; (3) morning visits of the surgeons to the hospitals; (4) proximity of the hospitals to the residences of the surgeons; (5) the removal of all pressure at night; (6) the intelligent co-operation of the patients; and (7) the physique of the patients, who contrast with the plethoric subjects of aneurism met with in England.

AID TO THE SICK AND WOUNDED.

THE Committee have published a report of the operations of the British National Society for Aid to the Sick and Wounded during the Franco-German War of 1870–71. The total number of contributors to the fund in aid of the sick and wounded of France and Germany is estimated at about 100,000, and the sum subscribed amounted to £297,000. After the payment of all expenses there is still an available balance at the bankers in favour of the Society amounting to £73,212, which is to be invested in the names of some trustees as the nucleus of a fund for future use. The new Council of the Society intend applying to her Majesty for a Charter of Incorporation. We do not doubt that a large amount of suffering was relieved by the English Society during the late war; but we do venture to doubt whether the principle of a neutral affording such aid to belligerent powers is a sound one. It seems to us very much like a benevolent method for enabling the combatants to prolong the strife by relieving the respective Governments of duties which rightly belong to them. The formation of a permanent National Society, however, does not seem to us open to any objection of this kind. In the event of England being hereafter engaged in a war on an extensive scale, it is extremely improbable that any existing Government would be able to cope with all the difficulties that would arise, or supply the requisite aid to the sick and wounded; and it is quite certain that the nation would subscribe large sums and frame some scheme for supplementing the Government work in this respect. We are happily at peace, and the present time is therefore favourable for organising a society of this kind. There should be none of those faulty arrangements that engender a spirit of antagonism between the voluntary aid societies and the military medical staff. More than one German surgeon during the late war made great complaints of the Johanniters; and it was the subject of remark by several correspondents of THE LANCET that volunteers—medical and otherwise—were more anxious to occupy positions of prominence, and to familiarise the public with their names through the newspapers, than to perform the steady hard work of an unpretending kind that was ready at hand.

CARLSBAD.

THIS celebrated watering-place has been favoured up to this time with an unusually large number of visitors. The season extends from the middle of April to the middle of October. Up to August 15th no less than 15,000 visitors had been registered, which is five or six thousand more than the average. It is a rule at Carlsbad that no one can stay more than eight days without being registered, and subjected to a local or residential tax. Medical men of all nations are exempted from this tax, and are presented with a free

ticket to the reading-rooms and all the bathing establishments. Carlsbad is picturesquely situated in a narrow winding valley, the heights surrounding which are covered with woods, which are intersected with footpaths of great beauty, and the air of which is perfumed with pleasant balsamic odours from the trees. The visitors for the most part are Germans, Austrians, and Russians, with a sprinkling only of English and French. There are as many Americans as English. The only entertainment in this somewhat dull place is music. But the medicinal virtues of the springs are sufficient to keep up its reputation and to secure visitors.

As our readers know, the waters are hot mineral springs, of which the chief elements are sulphate of soda, carbonate of soda, with free carbonic acid, and an infinitesimal quantity of arsenic and iron. The temperature of the different springs varies from 100° to 145° F. The waters are used both for drinking and bathing purposes. Formerly the chief use of the waters was in the way of bathing; but now more importance is attached to the internal administration of them. It is a curious sight from five to eight in the morning to see the drinkers marching up to the spring in a line a quarter of a mile long, in single file, each carrying a cup swung round the shoulder with an ornamental strap, which is presented to one or other of the young ladies who serve out the water, and who, by the way, are generally rather pretty.

The complaints for the cure or alleviation of which the Carlsbad waters are chiefly famed are those of the liver, gravel, rheumatism, and gout, and that peculiar dyspepsia which affects the overfed inhabitants of rich and large cities. In cases of jaundice and lithiasis the waters are considered almost specific. The physiological action of the waters is to increase excretions through the bowels, skin, and kidneys. The waters are contra-indicated in cases of great debility, of anæmia, or of organic disease. The regimen of the place is plain almost to severity, most of the patients being allowed meat only once a day.

THE COST OF MEDICAL EDUCATION.

IN an article under this heading, we, in April last, called attention to the fact that, in order to meet the increased requirements of the examining boards, it would be necessary to increase the fees paid by medical students. We notice that the larger metropolitan schools have wisely followed our suggestion, and have made a slightly increased charge; and though the small schools may still be content with a scale of fees which can in no sense be remunerative to the teachers, we imagine they must shortly follow the good example of the larger establishments. One remarkable feature in the prospectuses of all the schools cannot fail, however, to attract notice, and that is the amount of money given away in scholarships, prizes, and prize appointments. It seems to be almost possible for a sharp youth, well coached in all the intricacies of the curriculum, not merely to recoup himself for the original outlay of fees, but absolutely to make money during his student-career, besides living at free quarters for an indefinite period. Now the prize system has long ago received the condemnation of all thinking men, and it is notorious that "prize-getters" are not the best practitioners of medicine and surgery; and yet here we have every one of the London schools parading its advantages against those of others, with the view of attracting the ingenuous youth in October.

Passing to another feature of medical education, we rejoice to find in almost every hospital that the resident clinical appointments are given as rewards, and without the payment of fees, and that in many instances also the board of the residents is given by the charity. This is as it should be, for the patients who are the objects of the charity reap fully as much benefit from having a well-qualified energetic resident staff as its members do from the practice thus afforded them; and the custom of resident officers paying for their board will, we hope, soon be as obsolete as that of paying premiums to the medical officers for serving under them.

Whatever beneficial co-operation between hospital charities and medical schools may be brought about in this manner we would gladly foster; but the case is somewhat different when it is proposed to subsidise the lecturers in a medical school from funds contributed solely for the hospital charity. Two remarkable advertisements have, within the last few days, appeared consecutively in the daily papers: in one the London Hospital (a charity the good work of which we recently took occasion to notice) appeals to the public for funds, and owns to having been compelled to borrow £7000 to pay its half-year's bills; in the other, a quarterly General Court of the Governors of the London Hospital is summoned for September 6th, which is made special to consider the following propositions of the House Committee:—

1. "That, in order to an increase of educational facilities at the Medical College, and the consequent benefit to patients, a grant of £200 be made in aid of the salaries of the lecturers.

2. "That, to ensure the best treatment of patients in the great out-door department of this hospital, an honorarium of £30 be granted to each member of the assistant staff. These proposals being subject to the appointment of a joint sub-committee for superintending the professional working of the hospital, and subject also, in the event of adoption, to their being submitted, prior to renewal at the end of the first twelve months, for the further special consideration of the Governors."

To the latter proposition, that the assistant medical and surgical staff should receive some remuneration, we have no objection to make; on the contrary, we think it is only due to the medical profession that it should always be remunerated for its labour. But to the former proposal, that £200 should be diverted from charitable purposes to increase the salaries of the lecturers, we cannot but object as a public scandal; and if any argument were needed to support the suggestion ventilated last year in these columns respecting the amalgamation of certain medical schools, it would be found in this unprecedented proposal.

JAMES RENFORTH.

THE sudden death of James Renforth, the aquatic champion of the world, which has just occurred in America, opens up several points of interest with regard to the effects of training and of severe exertion. The general facts are well known. The expressions used by Renforth were sufficiently ambiguous to have suggested the idea of poisoning, which we regret to find has been entertained, and we may well discard; but when we ask what was the real cause of death the answer is not quite so readily given. In such a case as this, death begins either in the brain, the lungs, or the heart. The meagre account of the post-mortem at present received shows only that some considerable congestion of the lungs was discovered, to which it is suggested his death is attributable. We can scarcely admit this to be a correct view. The pulmonary congestion was far more likely to be a secondary than a primary state. It is exceedingly improbable that two hundred yards' rowing in a man in a high state of training, and previously in good health, would *per se* cause such engorgement of the pulmonary vessels as would occasion a fatal result. It is unlikely again, we think, that the primary lesion was in the brain. His own feelings seem to have told him this; and it scarcely appears

probably that he could have continued to row for nearly a mile had he experienced either an epileptic or an apoplectic attack. The heart alone remains, and it seems to us highly probable that the immediate cause of death was the breaking down of one of the auriculo-ventricular valves, an accident that might easily occur, might readily be overlooked at the post-mortem, unless particular attention were directed to the point, and would certainly be followed by the symptoms observed in Renforth's case. The immediate effect would be a shock to the system generally, the supply of blood to the brain would be suddenly and seriously interfered with, though not sufficiently so as to produce sudden and complete unconsciousness, and he would be able for a time to continue his exertion. Every effort, however, would augment the danger by driving more blood to the already overcharged organ, and this again would naturally lead to congestion of the lungs, and general cyanosis. In accordance with this, one of the witnesses states that he was much struck with Renforth's stiff and livid appearance when lifted out of the boat, a state clearly dependent on imperfect arterialisation of his blood. That his pulse was very feeble, which is just what we should expect in a case of rupture of the auriculo-ventricular valve, or of its chordæ tendineæ, abolishing its function, is evidenced by the fact that Dr. Johnson ordered him brandy-and-water, a line of treatment that would scarcely have suggested itself in death from asphyxia, but was perfectly natural when the pulse was feeble and irregular. On the same hypothesis we have a ready explanation of the difficulty experienced in obtaining blood from his arm.

The only other view that can be taken is, we think, that he had a kind of epileptic fit, in support of which are the statements made to some of the local papers by Mr. Anthony Bell, who says that on one occasion he was called to attend him while suffering from a fit on the evening of his race with Bright. He was then exceedingly ill, pulseless, and cold, and he had three successive epileptic fits in Mr. Bell's presence. From the examination Mr. Bell then made, he came to the conclusion that Renforth was suffering from hypertrophy of the heart, and he was advised to discontinue rowing.

Whatever the cause of death, putting aside all ideas of poison, it is impossible to avoid connecting it with the sudden and violent exertion undertaken by Renforth; and, whilst of extreme rarity in a professionally trained man, this is an additional argument in support of the views we have always maintained, that no young man should attempt any very severe bodily effort without careful training and preparation, for if in one so thoroughly accustomed to the use of the oar as this man was some organ is found to be incompetent to bear the strain suddenly made upon it, we may be sure that to try the same thing in an untrained subject must be a proceeding fraught with the gravest danger, and to be entirely discountenanced by every sensible youth.

A QUESTION OF MEDICO-LEGAL RESPONSIBILITY.

THE melancholy suicide of a young lady near Leominster when confronted with two medical practitioners empowered by a coroner to examine her person and ascertain whether she had given birth to a child, raises, not for the first time, the question whether such investigations are in accordance with English law. Another coroner, writing to *The Times*, expressed a rather strong opinion that the coroner had no right to give such an order; and, so long as the law takes every precaution to prevent an accused person from being convicted out of his own mouth, it seems absurd to suppose that it can contemplate the physical examination of a woman by force, simply with the view of ascertaining whether a serious charge is to be brought against her or not.

We have nothing to do with the coroner, who is amenable to a much higher authority than ourselves, but we must express our great regret that two medical men should have acted in the way they did. We have no doubt they were actuated by the best intentions; but what, we ask, was more likely to bring about the melancholy result which followed than the method they pursued? To go to the house in the absence of its master, to communicate directly with the object of suspicion, and then to keep watch over their patient, was not the conduct we should have looked for in two educated gentlemen. Moreover, a case of a very similar character which occurred only two years back ought to have acted as a warning to the whole profession. In THE LANCET of May 29th, 1869, will be found a leading article commenting upon an action brought by a mother and daughter against a surgeon and an inspector of police at Hitchin for insisting upon examining them with the view of ascertaining if either had been lately delivered, and damages were given against both defendants. In this case, moreover, the women had consented to the examination, but under pressure. The remarks we then made would *mutatis mutandis* fit thoroughly the more recent case. They were as follows:—"It is quite certain, not only that the surgeon should have waited for a more deliberate consent, but that he should also have obtained the consent of the husband and father, who, on returning home in the course of the day, heard for the first time of the indignity to which his wife and daughter had been subjected..... We think, moreover, that it is very undesirable that medical men should, in any way, lend themselves to police requirements."

THE FASTING WOMAN.

WE observe in the local journals an account of another case of a fasting woman, who puts the unfortunate Welsh fasting girl into the shade. She is described as having been a strong, healthy woman, thirty-three years of age, who became unwell rather suddenly, and has for the greater part of the last three years been confined to bed, whilst for the past *sixteen* months she has, so it is stated, contrived to exist without food or drink save a little water occasionally. After this let us hear no more of chameleons living on air, or of frogs sleeping away centuries immured in stone. Here is a woman who, by preference, takes her daily meal with Duke Humphry—a *lusus naturæ* that even Burns's comprehensive grasp fails to include; one who has meat, and "winna," not "canna" eat. Will no one introduce her to a professed spiritualist? Surely one whose *esprit* must be out of all proportion to her corporeal substance, and who must be rapidly becoming altogether *spirituel*, would form a first-rate medium. Her idiosyncrasy in objecting to a light in her room at night would doubtless also prove advantageous, if all tales be true. It is to be regretted that the contributors to some of the papers are not compelled to take out a course of lectures on physiology. For their benefit we give the following facts. The whole affair is a simple matter of calculation. A healthy person at rest breathes about 480,000 cubic inches of air per diem, which, in round numbers, will give about 20,000 cubic inches for the amount of carbonic acid expired, or nearly 10,000 grains by weight, which contains 8 oz. of solid carbon. This weight of carbon must be supplied per diem to a healthy person to maintain the ordinary weight. A debilitated woman lying in bed might perhaps exhale somewhat less, say 5 oz., or even 4 oz. In this case, supposing that she consumes no food at all, she would lose a pound in four days, or a stone in fifty-six

days; but our patient has managed to live nearly, if not quite, 500 days; consequently she must have lost at least five stone of carbon alone in that time. But death ensues by inanition when the body has lost about 40 per cent.; so that, even were her original weight twelve stone, she could scarcely be alive now. But no account has here been taken of the nitrogen, of the hydrogen, or of the salts, leaving the body by the natural channels of the skin, kidneys, and bowels, and over the discharge of which the woman can exert no control, and which would collectively considerably exceed the carbon in weight.

EDUCATION AT PROVINCIAL HOSPITALS.

MR. W. P. SWAIN, F.R.C.S., of Devonport, has just published a very timely pamphlet, in which he directs attention to the opportunities which the provincial hospitals afford, if rightly used, of giving the young student a groundwork of practical knowledge upon which to build his medical studies, and thus of fitting him in the most satisfactory manner for entering upon practice when his curriculum of study is finished. Mr. Swain is one of the surgeons of the Royal Albert Hospital, and evidently speaks from experience when he urges the utilisation of the provincial hospitals as a means of instruction for young students. In support of his view that the first of the required four years of study may be advantageously spent at a country hospital, he quotes from the report of the Court of Examiners of the College of Surgeons, presented last year to the Council; from a lecture of Dr. Headland's on medical education, published in THE LANCET of February, 1870; from our editorial remarks upon the lecture in question; and from the prospectus of St. Bartholomew's Hospital.

Mr. Swain strongly recommends the student to pass the matriculation examination of the University of London, and, having done so, to become the pupil of some provincial hospital surgeon, who is bound at once to report to the College of Surgeons the fact of his having taken a pupil, in order that the youth may date his commencement of professional study from that time. He would then commence a course of study embracing (1) osteology, (2) pharmacy, (3) hospital practice, including the minutiæ of surgical practice, and (4) the use of the microscope, under the eye of his master, of whose private practice he would see just enough to gain an insight into its routine, and contrast it with hospital practice. We could wish that all the first-year's men who are coming up in October had been submitted to such instruction as Mr. Swain has here sketched out, and we commend his pamphlet to the perusal of the parents of intending students, and urge them to pause ere they enter their sons wholly unprepared to a medical school.

THE £1000 DONATIONS.

WE have been at some pains to ascertain how many donations of £1000, anonymous or otherwise, have been given to the metropolitan hospitals within the last five years. The subjoined list is possibly not quite complete, but the omissions cannot be very numerous. The British Home for Incurables, Clapham-rise, heads the list with ten donations, three of which were from "C. T. D."; the kindred establishment at Putney-heath, and the Middlesex Hospital come next with five each; then follows St. Mary's with four. The number of those which had three is greater, including the London Hospital; King's College Hospital; the Children's Hospital, Great Ormond-street; the Brompton Consumption Hospital; the Royal Hospital for Diseases of the Chest, City-road; the London Fever Hospital; the Metropolitan Free Hospital, Devonshire-square; and the National Hospital for the Paralysed and Epileptic. The following hospitals had two donations each—University College; Westminster; St. George's; Charing-cross; the Hospital for Women, Soho-square; St. Mark's Hospital for Fistula; the Female Lock Hospital; the North London Consumption Hospital; the Cancer Hospital; and the East London Hospital for Children. The German Hospital; the Royal Orthopædic Hospital, Oxford-street; and the Infirmary for Epilepsy and Paralysis, received one donation each. These yield a total of seventy-one separate donations of £1000, the greater part of which were from anonymous benefactors. The gifts are chiefly from persons who conceal themselves behind three initials, rarely two. The initials vary with the different hospitals, but it is usual to find that the benefactions given to any one hospital are given by one set of initials. Whether all the anonymous donations are, as has been supposed, forwarded by one person it is impossible to say, and we should be the last to try to drag these benevolent persons (or person as the case may be) from the seclusion in which it is their (or his) pleasure to remain. Besides the donations mentioned above, the German Hospital, Dalston, has had a munificent gift of £10,000 from Baron von Diergardt, of Vienna; and the Brompton Hospital for Consumption, the Victoria-park Hospital, University College, and the Middlesex have each received £2000 from Richard Wallace, Esq., bringing the total money value of these monster donations up to £89,000. We have chosen five years as the arbitrary limit of time to which to confine our inquiry, but we should state that the great majority of these donations have been given since the beginning of 1869.

THE PAYMENT PER CASE SYSTEM.

DR. GRIFFIN, of Southampton, has resigned his Poor-law appointment on the ground of dissatisfaction with the whole system of Poor-law relief in that town. He attended 2493 cases in the year for £103. He complains that orders for medical attendance are given indiscriminately, and without proper inquiry into the nature of the cases, and to men with wages varying from £4 to £14 per month. He forcibly shows that of two men with equal wages one will be in a sick club and independent of the Poor-law system, and another will expect to be attended by the Poor-law medical officer, and to have his wife and children so attended whenever necessary. He naturally thinks that medical officers, and ratepayers, and the poor themselves are all injured by such a system, and recommends the plan of payment per case. The guardians, we are sorry to say, did neither refute Dr. Griffin's charges nor promise the amendment of the system. One guardian, at first in favour of payment per case, thought, after discussion, that the present system was "the most economical," and it was resolved simply to advertise for a successor to Dr. Griffin at the same salary. The guardians may be convinced that things cannot go on as they are at Southampton, and that they will have to find out a system which is not only economical but just. This is a less virtue in the eyes of some guardians, but neither ratepayers nor medical men will long be satisfied with such a pauperising administration of the Poor Law as seems to obtain at Southampton.

INTEMPERANCE IN THE ARMY.

AMONG the changes that have been recently introduced into the army it is satisfactory to learn that the plan of dispensing with escorts for conducting recruits to their respective destinations works well. On the other hand, the same cannot be said of the system of weekly instead of daily payments to the soldiers. In many instances it has happened that drunkenness, with an increase of disease and petty crime, has resulted. The prevalence of intem-

perate habits in our population generally is most lamentable, but not more so than the indisposition shown by the public to adopt any scheme for limiting the evil. The brewers and public-house keepers form politically a very strong class, and manage, by their opposition, to prevent every attempt at legislative interference. Soldiers, as a class, are probably not much more intemperate than other men, but they lead more monotonous lives, have fewer pursuits of a pleasurable kind, and are relatively uncontrolled by domestic ties, and the temptation to spend their pay at the nearest public-house is consequently greater than among civilians. We understand that, with the accumulated pay of the week, several soldiers have brought on diseases clearly attributable to intemperance, and the consequence has been that the practice of weekly payments has been discontinued at several stations. As far as recruits are concerned, we believe that an increase in the quantity of the meat ration is required, and that growing lads often have recourse to beer as a substitute for food.

HEALTH OF CUSTOMS OFFICERS.

THE very useful official Report of Dr. Dickson, R.N., (Medical Inspector of Customs) to the Commissioners, has recently appeared. The Inspector adopts the plan of dividing his Report into four sections, each representing a fourth of the year, and each including a summary of the meteorology of the three months, so that the reader can readily judge how far climatic varieties influence health. And, in the Report under consideration, this arrangement is the more valuable inasmuch as most of the patients under Dr. Dickson's care perform their duty in the open air, and are almost continuously on the river. The permanent establishment of the Customs in the port of London now consists of 1047 officers, 808 being stationed in London, and 239 at Gravesend. Although there is a large proportion of men of advanced age in the force, seven deaths only occurred during the past year, not one of which was the result of acute disease. When we consider that the rate of mortality in the metropolis ranged during the year from 22 to 26 per thousand, the fact above recorded must tend to show the comparative healthy nature of out-door occupations. But Dr. Dickson very properly observed in his last Report that some more decided effort should be made to register sickness as well as mortality, and the statistics which are inserted in his Report go to prove that in public institutions, as well as in the combatant and civil services, a systematic registration of this sort would be by no means difficult. If, for instance, the medical officer of the Post-office presented an annual Report analogous to that produced by the Medical Inspector of Customs, very valuable and suggestive comparisons might be drawn as to the respective advantages of occupations on land and on water.

SALE OF POISONS AND THE PHARMACY ACT.

THE Brighton poisoning case throws some light on the ease with which the strongest and most suspicious poisons may still be procured from chemists by comparative strangers. The 17th clause of the Act makes it unlawful to sell certain poisons, amongst them strychnia, to any person unknown to the seller, unless introduced by a person known to the vendor. Mr. Garrett sold the prisoner ten grains of strychnine on three separate occasions, respectively the 28th of March, the 25th of April, and the 11th or 12th of May. Mr. Garrett only knew her in the first instance as a very occasional ready-money customer. He did not even know her by name up till March last. He properly refused to accommodate her with strychnine unless introduced by a witness well known to himself. This condition was soon complied with. The lady so bent on having strychnia to poison cats with went to a neighbouring milliner's, Mrs. Stone, with a very thick veil over her face, and wished to purchase another veil, on account of severe neuralgia. She went away, and in five minutes returned, asking the milliner as a favour to accompany her to Mr. Garrett's to sign her name. She wanted some poison to stuff birds with; "her husband and she were naturalists." Mrs. Stone, thinking she had been a customer before—she could not see her face,—went and signed her name, and the ten grains of strychnine were supplied. The same process was gone through on a second occasion, "the cats being as numerous as ever," and the inveterate neuralgia requiring another veil to be procured from Mrs. Stone. On a third occasion the introducer's signature was dispensed with. The value of the introducer in this case was very questionable. She was well known to the chemist, but never saw the lady's face who bought the veil, and whom she helped to buy the strychnine. It is probable that this provision of the 17th clause really facilitated the purchase. The chemist, at least in the first two instances, felt relieved of responsibility by compliance with the terms of the clause. Had he been acting on his own responsibility probably he would have refused.

ACTION OF QUININE ON THE UTERUS.

M. MONTEVERDI communicates to the *Nuova Liguria Medica* the results of a series of experiments he has made on this subject. He has invariably employed the sulphate of the alkaloid. He finds that quinine exerts a general tonic influence on all the organs of the body, but especially upon the uterus. In the course of half an hour after it has been administered, short contractions occur in the uterus, unaccompanied by pain; and these gradually become longer and stronger, with distinct intermissions, so as to resemble closely ordinary pains of labour, the effect lasting for about two hours. In order to effect the expulsion of the fœtus and of the placenta, he believes that doses of about four grains will be found the most appropriate. Quinine appears to be preferable to ergot, because it exercises no injurious influence either on the mother or child, because it is very certain in its action, because the contractions it induces are very regular and natural in their character, and because it is free from danger at whatever period of pregnancy it is administered; or in cases of contracted pelvis, incomplete dilatation of the os uteri, and antecedent to the escape of the waters. He finds that it is of service in the metrorrhagia of pregnancy, in amenorrhœa in consequence of a torpid condition of the uterus, and in puerperal fever, as a consequence of its tonic action. He considers quinine to be indicated in all diseases of the digestive organs, and of the urino-genital system dependent upon atony of the various organic constituents. M. Monteverdi gives a caution in regard to the use of quinine in pregnancy complicated with any disease requiring its administration, lest abortion or premature delivery be induced. In cases where quinine proves too energetic in its action, he recommends opiates to diminish its effect. He considers quinine to be contra-indicated as a general rule in hysteria.

NEW FOOD FROM AUSTRALIA.

WE learn from the last number of the *Food Journal* that a new meat, kangaroo tail, has begun to be imported into this country. As a rule, herbivorous animals are well adapted for the food of man, and kangaroos form no exception to this rule. The excellence of their flesh was recognised by the settlers in Australia at a very early period.

The tail, which is very large and fleshy, is regarded as an especial luxury; and kangaroo-tail soup is probably one of the best kinds of soup ever placed upon the table in any land. It comes to this country in a perfectly fresh state in tins, like Australian beef and mutton, and is sold under the name of kangaroo venison. The specimens hitherto brought to the market are highly flavoured by spices, and are very agreeable to the taste. They can be obtained from Mr. J. W. Billiatt, of Upper Thames-street, London, in two-pound tins, at a price of 3s. a tin. It is probable that the tails are those of the Macropiss Brunnii, which is common in many parts of Australia and Van Diemen's Land.

THE ROYAL ORTHOPÆDIC HOSPITAL.

IT appears to be the rule at the Orthopædic Hospital in Oxford-street, that the house-surgeon should send in to the Committee a report on the condition of the hospital, which is read at their weekly meetings. When Dr. Bourne, the present resident medical officer, had sent in a third weekly report calling attention to the deplorable condition of the hospital, and urging the immediate adoption of sanitary measures as the only means of reducing the alarming death-rate which had been for some time maintained, the Committee requested that valuable and conscientious officer to resign his post, on the plea that it was necessary that their house-surgeon should be capable of working *harmoniously* with the existing authorities and officials. Dr. Bourne was not, however, a man to look back after he had put his hand to the plough, and he declined to be put quietly out of the way as soon as he had taken a good and necessary, though painfully disagreeable, work in hand; but the attempt of the Committee thus to get rid of him explains itself. Between the 4th of May last and the date of the inquest to which we alluded a fortnight since, there appear to have occurred at this hospital some eight cases of diphtheria, of which six were fatal; since that time three other inmates have taken the disease. To the public this state of things cannot be satisfactory—indeed it is intolerable. There are faults of construction as well as overcrowding and bad nursing in the hospital. These are the main evils, so far as it is concerned; and the sooner they are altered the better. The governors, we hope, will also speedily find a way to secure harmonious action among the officials; and in so doing they cannot ignore the statements and opinions of the medical staff.

SMALL-POX AT MALTA.

As our readers are doubtless aware, small-pox prevailed at Malta during the same time that it was creating havoc at other places. A good many soldiers belonging to the garrison were attacked, and some died; but it was among the native population that the disease chiefly spread. A medical periodical just started in the island by Dr. Gulia, in an article on this subject, expresses its regret at no statistics having been published of the attacks and deaths from this disease among the civil population. The epidemic was, beyond all doubt, it declares, introduced by a sailor affected with small-pox who was imprudently admitted into the Central Hospital, whence the pest was propagated throughout the island. After raging in Floriana, it spread to Musta and Cospicua, and then to Valetta. Just as among ourselves, there have not been wanting a few medical men, it appears, in Malta who went about endangering the public health and damaging their own reputations by declaiming against vaccination. We certainly concur in thinking that the medical statistics of these islands should be published annually. We are glad to see, by the *Malta Times*, that Dr. William Domville, the head of the Naval Hospital, gave an excellent example to the native population, by immediately setting about revaccinating the fleet on the appearance of the epidemic. Upwards of 3000 men of the squadron were revaccinated, and, owing to this timely measure, small-pox, which was still prevailing in the island at the end of July, had been almost entirely averted as far as the fleet was concerned. Among the officers and men revaccinated not one contracted the disease.

ST. THOMAS'S HOSPITAL.

SIR FRANCIS HICKS, the treasurer of St. Thomas's Hospital, has, during the past week, repeated in the advertisement columns of the daily papers his touching appeal to the benevolent public for £20,000, to which we recently called attention. A subscription list, amounting to some £12,000, is subjoined; but there is no mention made of the fact, that for a month past St. Thomas's Hospital—a Royal hospital—has ceased to exist as a charity, the establishment at Newington having been closed, whilst that at Stangate is not ready to be opened, and consequently the poor are being sent to seek relief from neighbouring charities which have no Royal foundation to fall back upon. Again we ask for whose benefit half a million has been spent in bricks and mortar?

NEW TREATMENT OF CHOREA.

M. WENZ, in Dörsbach, is stated in the *Aerztliches Literaturblatt* for July 7th to have treated a girl of seventeen years of age, who had not hitherto menstruated, but who had been for several weeks affected with chorea of the right side, by local anæsthetisation of the skin over the spine. He employed Richardson's apparatus, with thirty grammes of sulphuric ether, slowly traversing the whole length of the column. A cataleptic condition was induced, with suspended consciousness. The same proceeding was repeated for several days, but with only half the amount of ether, and with the result that the chorea was abolished, its return being prevented by judicious general treatment directed to the improvement of the quality of the blood. Dr. Wenz concludes his paper by recommending the adoption of a similar plan in cases of tetanus.

THE WORKSHOPS REGULATION ACT.

WE have always persistently maintained that the Government inspectors employed under the Factory Acts should have similar power granted to them as regards workshops, and that medical inspection is as fully necessary in the one case as in the other. And hence it is a matter of congratulation to see that, by an Act which received the royal assent at the close of last session, the administration of the Workshops Regulation Act, 1867, is vested in the inspectors of factories. We trust that the provisions of this Act, which has hitherto been to a great extent a dead letter, will now be fully enforced. For it is manifestly unjust, as well as absurd, that a factory employing twenty hands should be under sanitary supervision, whereas a workshop with fifty or eighty hands is under no official surveillance whatever.

ITALIAN CIRCUMNAVIGATION.

THE Italian ship *Principessa Clotilde* has just returned home from a voyage of circumnavigation of forty months' duration. She left Naples on the 25th of April, 1868, touched successively at Japan, China, Batavia, Java, Borneo, Singapore, Siam, Rangoon, Calcutta, Point de Galle, Aden, and Suez, and finally, after passing through the Canal, arrived at Brindisi. This voyage has, of course, important sanitary aspects, and the commander of the expedition records that

his crew have enjoyed excellent health. One officer and five sailors were lost, but these casualties occurred during several severe storms that the vessel encountered in the Indian Ocean. The Marine Department of the Board of Trade might possibly add a leaf to their book of legislation on health of crews by obtaining from the Italian Government categorical particulars as to diet, antiscorbutics, clothing, quarters of crew, and other particulars in connexion with this remarkably successful voyage.

THE NORTH RIDING INFIRMARY, MIDDLESBOROUGH.

WE regret to learn that the discourteous and perfectly unjustifiable conduct of a Court of Governors of the above institution, in passing a law by which the staff of honorary officers was placed on the same footing as the paid resident staff as regards suspension by the House Committee, has led to the resignation of two of these officers, Dr. Ellerton and Dr. Veitch. We do not quite understand how their colleagues can continue to hold office on such terms; but at least it is satisfactory to find that, of seventeen practitioners in Middlesborough unconnected with the infirmary, only *one* came forward to fill the vacancies thus created. Much as we could have wished that the profession in Middlesborough had been unanimous in its view of local medical politics, it must at all events be gratifying to Drs. Ellerton and Veitch that they have thus the tacit support of the majority of their brethren.

A MEDICAL officer of health has been appointed for the borough of Walsall. The sanitary condition of this considerable manufacturing town has for several years been very bad, both in regard to its drainage and water supply. The creation of this office must be hailed with satisfaction by the entire population. Typhoid fever, directly traceable to such conditions as the above, has been endemic for years. Its ravages, which have swelled the list of mortality during the summer and autumn months, may now be expected to receive a check. The Improvement Commissioners have secured the services of Dr. MacLachlan, who is likely to make a very efficient officer of health. His hands will be full for a very long time to come; it is to be hoped they will be strengthened by the authorities in carrying out the improvements which will have to be made.

DR. GREENHOW lately presented, by request, a report to the Medical Department of the Privy Council on the examinations conducted by the Pharmaceutical Society, from which it appears that during the past year the Board of Examiners have held twenty-six meetings, four for the preliminary and twenty-two for the technical examinations. A total of 742 candidates presented themselves, of whom 521 passed and 221 were rejected; whereas there were 258 candidates for the minor or pass examination, of whom 178 passed, and were registered as chemists and druggists, and 80, or nearly one-third, were rejected.

A BULKY Blue-book has lately been issued (in continuation of a former series) containing reports by our Consuls abroad on the Condition of the Industrial Classes in Foreign Countries. Much valuable information is thus brought together, some of it especially useful to intending emigrants in regard to matters connected with the preservation of health abroad.

THE Town Council of Stamford have decided upon adopting the Nottingham tub-closet system, and have authorised the expenditure of a sum not exceeding £450 as a first outlay.

THE three medical inspectors recently appointed in consequence of the increase in the Civil Service Estimate voted to the Medical Department of the Privy Council are Dr. Thorne Thorne, Dr. Anthony D. Home, V.C., C.B., and Dr. Ballard, formerly medical officer of health for the district of Islington.

AT a meeting of the Greenwich District Board of Works, held some few days since, it was resolved that, in the opinion of the meeting, the cost of sanitary proceedings in the port of London should be distributed over the metropolis, and should not be borne by the below-bridge districts alone.

SEVEN cases of scurvy were admitted into the Seamen's Hospital last week from a Russian ship just arrived from the East. Particulars of these cases will shortly be given in the "Mirror."

M. THIERS has appointed Mr. O'Scanlan, the Director of the Irish Ambulance, a Chevalier of the Legion of Honour, for his services in connexion with the ambulance during the Franco-Prussian war.

NOTES ON PROVINCIAL HOSPITALS.

THE HULL GENERAL INFIRMARY.

THE Hull Infirmary is a substantial structure founded in 1783, and built in the classical style so fashionable 100 years ago. It has a good stretch of open ground in front of it, but is very closely surrounded by houses at the back. The entrance hall contains busts of Jenner, Sir James Alderson, and of some benefactors of the hospital. From it opens on one side the board-room, and on the other the waiting-room for out-patients, which, however, is so restricted that the patients overflow into the hall. The window through which the out-patients receive their medicines from the dispensary also opens into the hall, so that this space, which is comparatively small, is too much occupied by out-patients. Leading, as the hall does, to the lower offices, as well as by a flight of stone steps to the upper wards of the hospital, and having a constant draught from the entrance door, it must be very cold for sick persons to wait in, and the aggregation of out-patients in this situation cannot be conducive to the sanitary condition of the in-patients. There is a good-sized day-room for the male in-patients (which, however, is inconveniently near a row of houses in the rear of the hospital), but none for the female in-patients. Some of the convalescent patients are sent to the Scarborough Sea-bathing Infirmary, but there is a project on foot for erecting a suitable convalescent institution in some healthy situation in the vicinity of Hull. The staff consists of three physicians and three surgeons, and there are two resident medical officers. The hospital will accommodate 150 patients, but only 100 beds are usually occupied. Last year the average number of residents was 95, and the mean residence of each patient was 32·5 days.

There are no special wards for burns, for children, or for infectious cases. Some steps have, however, been taken to secure the houses which impinge on the back of the building, for the erection of a special department for contagious cases. The removal of these houses will undoubtedly be a great boon to the hospital, as they are unpleasantly near to the patients' day-room and to some of the wards, but we would fain hope that some other site may be found for this much needed contagious department, so as not to build again upon this side of the hospital, and deprive it of the increased light and air which it would obtain by the demolition of the present range of houses. The hospital appears to be liberally supported, the operatives taking, we are glad to see, an acknowledged part in its support by annual subscriptions, which last year reached the sum of £340.

The operating theatre is light and airy, and has recently been greatly improved; one end of it is utilised for the reception of some books and pathological preparations belonging to the hospital, many of which formerly had their home at the Hull and East Riding medical school, which existed here some years ago. They seem to lack arrangement, and to be worthy of a better and more suitable habitat than they at present possess. Among the specimens are four of excision of the knee-joint, in each of which the patella had been removed.

There are two small eye wards, that for males containing four beds, and that for females only one. All the floors are dry rubbed. At the time of our visit one of the wards was cleared out in consequence of scarlatina having occurred. The ward was about to be thoroughly cleansed, and the beds in it were to be burnt, as there appeared to be no convenience either in the hospital or in Hull itself for disinfecting them.

Fever of various kinds would seem to be prevalent in Hull. In 1870, 55 cases were admitted, which are thus subdivided in the report: febricula, 22; continued fever, 5; intermittent fever, 7; remittent fever, 3; enteric fever, 18. The treatment most commonly adopted is by sulphurous acid in half-drachm doses, abstinence from all solids, and from stimulants except when specially called for, and occasionally opium as a sedative. The result seems very satisfactory, for only four deaths occurred during last year, out of the whole number of cases treated.

A case of some interest (not uncommon in this hospital) which we noticed was that of a man, aged fifty-three, who was the subject of rheumatic paraplegia of eighteen months' standing, induced by constant exposure to wet and cold in following his employment as a keelman or lighterman on the Humber. There was no suspicion of syphilis, and the man was progressing favourably under the application of blisters to the spine and the internal use of mineral acids.

Among the other cases worthy of special notice we may mention a well-marked case of lead-poisoning in a young woman, aged twenty-one, who had, after a week's illness, been suddenly deprived of her sight. She had been engaged in some lead works for five years, but had suffered no inconvenience during that time, except headache; the gingival blue line was very marked. She was improving under the use of iodide of potassium in ten-grain doses given three times a day.

In the surgical wards was much to interest. Skin-grafting was being tried, and with some success. There was a case of excision of the scapula for myeloid disease in a girl aged seven, which was doing well, and many other cases which, did space permit, we would gladly refer to. Amputation of the thigh is generally performed by antero-posterior flaps, Teale's method being rarely adopted. Acupressure and torsion do not seem to be employed, the ligature being still held safest for securing large arteries. Ovariotomy has not been recently performed, and the success which has attended the performance of it does not appear to be great. Many fractures are met with. In the last year there were 20 of the femur, and 48 of one or both of the bones of the leg.

This hospital is doing a great amount of useful work, and doing it in a way which is alike creditable to the medical staff and to the committee of management; and with the addition of a special contagious department, and that necessary adjunct to every hospital of any size, a separate convalescent institution, it will be able to confer even a greater amount of benefit on the sick and suffering population of Hull than it already does.

THE METROPOLITAN GAS COMPANIES.

WE have before us a very able and interesting report, by the Gas Referees, on the amount of ammonia impurity in the gas supplied by the different London companies.

The Referees, on their appointment in 1868, fixed the maximum amount of ammonia for the City companies, and subsequently for the Imperial and South Metropolitan companies, at 5 grains per 100 cubic feet of gas. It is gratifying to know that all the companies have kept the average amount of ammonia well below this maximum, and that the few occasions on which the maximum has been exceeded have all been referable to some accident more or less unavoidable. The average amount of ammonia varies with the different companies. The Blackfriars Company is *facile princeps* in the matter of the purity of its gas, there having been no appreciable amount of ammonia detected therein since September, 1869. Taking the Blackfriars Company as the unit of comparison, we get the following table, which shows at a glance the varying purity of the gas at the different manufactories.

Gasworks.	Ammonia in gas per 100 ft.	
Blackfriars	None	
Westminster	3·02	
Brick Lane	2·05	Average, January to July, 1870.
Curtain Road ...	2·2	
Bow	·44	
Becton	None	
Fulham	·48	
St. Pancras	1·8	Average, Sept. 1870, to March, 1871.
Haggerston	1·4	
Old Kent Road ...	·82	

Seeing that the purification from ammonia is at once a simple and a profitable process, and there being no valid reason why all our gas should not be as free from this impurity as that made at Blackfriars, the Referees have resolved, on and after September 30th, to reduce the allowable maximum to one-half its present standard. They say, "the separation of ammonia from gas is a most profitable process for the gas companies, and was adopted by them at first of their own accord, as a means of increasing their revenue." The "scrubbers" employed by the Blackfriars company for getting rid of the ammonia have entailed an outlay of £3000, "but the value of the ammoniacal products obtained from these scrubbers is £3000 per annum." Taking the lowest estimate, "it appears that with the very best kind of scrubbers two-thirds of the cost of erection are repaid in a single year, and thereafter a large annual revenue is received from them." In this respect ammonia purification stands in a different category from sulphur purification, the processes of which constitute a pure outlay on the part of the gas companies. The form of scrubber recommended by the Referees is Mann's scrubber, which consists of a large iron cylinder filled with layers of coke, over which fresh water is allowed constantly to trickle. The gas passing through a scrubber of this kind is completely purified from ammonia. In conclusion, the Referees say, "It is indispensable, in the interests of the public, that the best process of purification should be everywhere adopted; and, with due time allowed to the companies, the Referees have resolved that what has been done at the Blackfriars works shall be done in every gas works under their control, and that, so far as regards the companies included under the Acts of 1868 and 1869, gas shall, ere long, be supplied to the public practically free from the ammonia impurity."

THE "RADCLIFFE" HOSPITAL TENT.

MR. NETTEN RADCLIFFE, the Medical Inspector to the Privy Council, has just rendered a valuable service to the community by designing a Hospital Tent, which is intended to furnish local authorities with a ready and inexpensive means of isolating cases of infectious disease. The floor of the tent is a parallelogram, measuring sixteen feet by fourteen, and the sloping roof is supported by a ridge pole, raised thirteen feet from the ground by three uprights. The walls are vertical, and three feet six inches high, leaving nine feet six inches for the sloping roof, and affording eighteen hundred and fifty cubic feet of interior space. One of the uprights is in the centre, the others are placed one at each end, and against the latter the canvas doors of the tent are made to close. Ventilators, well protected against the entrance of rain or snow, are placed in the roof; and besides these, the doors are so constructed as to roll back completely against the sides, and the walls to roll up under the flies, so as to leave nothing standing to intercept air but the sloping roof, which would then form a mere awning over the beds. If used for severe small-pox, or

other virulent contagious disorder, Mr. Radcliffe proposes that each tent should accommodate two patients only, in beds placed head to head along the middle line of the floor. For ordinary cases, however, each tent affords ample accommodation for four beds, which would occupy only ninety-one square feet of the two hundred and twenty-four square feet of floor space. Moreover, these beds may be variously disposed, either one in each corner, or all four parallel, and with their heads against either wall, so that the arrangement may be governed by the direction and force of the wind, and may be always such as to afford the most complete possible ventilation, together with protection from draught. The whole structure can be set up and fixed by three men in fifteen minutes; and the total cost, complete with all appliances, is only £13 10s. A jean lining can be supplied for £9 10s. extra, and would be an increased protection in cold weather, or very exposed situations. One or more of such tents would be extremely useful in the many country workhouses in which it is difficult to find infirmary space for the isolation of infectious diseases, and would enable a little hospital to be at once formed in any adjacent field or garden. One of the tents might be used, of course, for any administrative purpose, or might be divided by an internal partition, so as to form a nurses' dormitory and a kitchen. The tent is made by Messrs. Pigott, of 59, Bishopsgate-street Without, who purpose to call it the "Radcliffe" Hospital Tent for Local Authorities. We trust that local authorities in many places will justify the latter part of the designation by hastening to provide themselves with so valuable an adjunct to the due discharge of the functions devolving upon them.

Correspondence.

"Audi alteram partem."

THE PROPAGATION OF CHOLERA.

To the Editor of THE LANCET.

SIR,—About a week ago the following statements appeared in an article which one of our leading London political papers published upon the Etiology of Cholera and our means of prophylaxis against it:—"The ordinary and natural means by which its germs are spread and introduced into healthy persons is through water. It is not too much to say that water is the vehicle of cholera.' It follows the course of great rivers; and it similarly follows the distribution of drinking-water, whether in town or in the country. Now, this being the case, it follows that if the contagion of cholera could be absolutely excluded from all sources of water-supply the disease could never become epidemic. ..... In the densely inhabited localities, where cholera finds its readiest prey, the air becomes a source of danger; but if all efforts were concentrated on the task of keeping the water pure, we need not fear the air."

The obvious corollary which any ordinary layman might, in his capacity of member of a board of health, draw from these misstatements would be, that all that is necessary in the way of meeting an attack of cholera is the taking off the pump handles in infected localities, and the replacing them by stand-pipes bringing pure water from some uncontaminated water company. Seventeen years ago, during the epidemic of 1854, this corollary would have been frequently drawn; but the multiplication of the numbers of newspapers both in town and country which has taken place since that period has much diminished the power which the journal I have quoted from once possessed in the provinces, and has rendered its rash utterances comparatively innocuous among local boards of health. We are here busily engaged in combating an actually present epidemic of small-pox and in preparing for a possible invasion of cholera, and I can testify that I have never had any of the above misdirections thrown in my teeth as evidence of the superfluousness of our precautions. It may, however, be of use to put forward the answer which a very little actual experience of a cholera epidemic will enable any observer to make to an exclusive advocate of the water theory. Before doing this, however, let me say that I would by no means be understood to say that cholera is not or may not be propagated by drinking-water. This would be as foolish nearly as if a man were to say that, because chloroform and alcohol were each usually taken into the system as vapour and fluid respectively, neither could ever come to act upon it in the manner familiar to the other. Still, I know it is well to begin with this disclaimer, for I find that one cannot advocate the doctrine of the efficiency of one cause without being supposed thereby to deny the operation and activity of all others. At any rate, having lately had occasion to say publicly in this place, what all well-informed men know to be the fact, that vaccination and revaccination were not sufficient during an epidemic of small-pox without some means for the isolation of small-pox cases as they arise, I have, to my surprise, found myself quoted by certain careless and unscrupulous persons as an opponent of vaccination.

Firstly, then, if the water theory of infection with cholera poison were exclusively true, persons who drank during an epidemic of cholera nothing but distilled water, or soda-water, or water which had been previously boiled, would therefore secure for themselves a perfect immunity from the disease. That this is not the case was shown, if I mistake not, during the Crimean war in the Baltic fleet. At any rate, it has been repeatedly shown since that time. (See *Zeitschrift für Biologie*, 1867, Supplemental Heft, "Cholera-Conferenz in Weimar," p. 20.)

A second answer may be given to any person who may have been carried away by such statements as those I have quoted, in the shape of the following history of an experiment, the truthfulness and accuracy of which is vouched for by no less trustworthy authorities than Sir Patrick Grant, the Governor of Jamaica, and Professor Pettenkofer, who relates it at p. 441 of the volume for 1868 of the periodical I have just quoted. Before railroads had come into use in India, troops in passing from Bangalore to Madras were always obliged to halt for some hours in a certain valley, and always with the consequence of an outbreak of cholera among them. This route was consequently used as little as possible; but Sir Patrick Grant was compelled by circumstances to send some troops by it at the time when Dr. Snow's theory and the facts upon which it is based had exclusive possession of the public mind. Filled with the hope that, by acting upon this view of the genesis of cholera, his troops might be enabled to pass through that valley of the shadow of death unscathed, Sir Patrick issued orders for the prevention of any and all soldiers from entering any of the native houses in the valley, and from drinking any of the water of the district; and, to make the execution of these orders the easier, the troops took with them an abundant supply of water from healthy districts. In spite of all these precautions, the encampment in this valley cost 80, out of the 400 men who entered it, their lives from cholera. This history speaks for itself.

Similar conclusions to that which this experiment teaches so clearly and terribly can be, though with more trouble, enucleated from some of those singular cases of the "capriciousness" (as we call it) of cholera, and also of typhoid, in clinging to one side of a street or river, and never touching the other. I cannot forbear to add that the mortality which this history records should deter even the most reckless of the class stigmatised, with not unmerited severity, by Mr. Herbert Spencer, as "shilling-a-liners writing opinions to order," from promulgating such dangerous exaggerations as those I began this communication with quoting, upon matters where the acceptance of their assertions may entail such grave consequences.—Yours obediently,

Oxford, August 23rd, 1871. GEORGE ROLLESTON.

To the Editor of THE LANCET.

SIR,—With cholera again threatening us it behoves us to adopt every possible precaution against it. It is now well known that foul air, filthy soil, and impure water are the local sanitary defects which favour its propagation and spread. I do not think it is too much to say that if no such sanitary defects existed we might banish all fears of the disease coming to our shores otherwise than by importation. With these defects so common, however, its present westward march cannot be regarded without some uneasiness.

Of all agents which favour the production of cholera, the

most common and most potent is impure water. On every occasion on which the disease has visited this country this connexion has been made more and more apparent. The large towns which suffered to such an alarming extent from the earlier visitations, escaped almost entirely when last the disease existed in this country. The visitation of 1866 consisted of a series of limited outbreaks in country villages and suburban districts. The explanation of this is simple. Our large towns, instead of drawing their water-supply from streams polluted by sewage, as they did during the earlier visitations of cholera, now have the water brought from sources free from the possibility of all such contamination. In addition to this, their drainage has been immensely improved.

The sanitary authorities of our towns are now so thoroughly alive to the importance of possessing a good water-supply and efficient system of drainage, and have probably been so stimulated by the excellent precautionary recommendations recently issued by the medical officer of the Privy Council, that I think we may indulge the hope that our towns are likely to escape the disease in 1871, as they did in 1866. Our chief anxiety should be for the rural and suburban districts, where there is no sanitary board or officer of health, where manure heaps are common, where the drainage is on the surface, and where the water is chiefly got from wells, probably in close proximity to a manure heap or surface drain, and, if so, sure to be contaminated by impurities whose presence renders those who use the water more liable to be attacked by cholera. It was in such localities that the disease appeared in 1866; it is such localities that are now in danger. How can the danger be guarded against? It is vain to expect that every cottar and labourer should have the water which he drinks analysed, and yet analysis is the only means by which such impurities can be detected, for it cannot be too generally known that water may be odourless, colourless, tasteless, and pleasant to drink, and yet be contaminated by sewage or other decomposing organic matter.

There is one means by which, it seems to me, the threatened localities may be to some extent known, and the danger to them in some degree averted. We know that the conditions, or local sanitary defects, which favour the production of cholera are also those which tend to produce enteric or typhoid fever. The latter disease we have always among us. Let every house in which it has appeared, and every village in which it occurs, look well to their drainage and water-supply, for the same circumstances which rendered them liable to enteric fever lay them open to the attacks of cholera. Should this disease visit our towns, it may safely be predicted that it will most prevail in, possibly be entirely limited to, those in which enteric fever is endemic. This is a point on which many medical men can give wholesome warning and advice. Let the inhabitants of every house and locality in which enteric fever (or even diphtheria or malignant scarlatina) has occurred, be cautioned to see that the water which they drink is pure and wholesome *, and that their drains and waterclosets are in good order, and an important step will have been taken towards keeping from our doors one of the most fatal diseases with which we have to deal.

I am, Sir, your obedient servant,

Dundee, August 21st, 1871. T. J. MACLAGAN, M.D.

DROWNING.

To the Editor of THE LANCET.

SIR,—On Aug. 11th I was hastily summoned to a case of drowning. I found a young man about nineteen years of age lying on his back on the beach, and men engaged in rubbing his limbs. The face was livid, and there was froth about the mouth and nostrils. The eyes were open, the conjunctiva congested, and pupils dilated and fixed. There was no pulse, no respiration, and no other signs of life. On percussion, both sides of the chest were dull, but less so in the subclavian regions. The patient was turned on his face, and a quantity of clear water and froth thereupon issued from the mouth and nostrils. He was then turned on his side, and the Marshall Hall method continued steadily for three-quarters of an hour. Up to the last a little froth issued from the nostrils when pressure was applied to the spine in the prone position. From time to time I examined the chest, and found the upper (right) lung gradually clearing, until at last it gave forth quite a natural resonant sound on percussion, whereas the lower lung remained perfectly dull. After using the Marshall Hall method for ten minutes, by which time I thought most of the water had come from the upper lung, I had the upper arm (for the patient was kept on one side—the left—the whole time) raised up over the head in the manner described by Dr. Silvester, when more air entered the tubes, and more froth was expelled on compression of the thorax when the body was pronated. I could hear the râles in the chest during the artificial respiratory movements. The face became less livid, but this was the only apparent change which occurred during our efforts. The heat of the body was kept up to at least 90° by the heat of the sun. I had no galvanic apparatus at hand.

After careful inquiry there is no doubt that the patient had been under water for twenty minutes, for he was bathing half a mile from the town, and this distance had to be traversed, and a boat rowed to the spot, before assistance could be afforded. He was found near the bottom, face downwards, in a sort of stooping position, and rose readily to the surface when an oar was placed beneath the body.

This case, although unfortunately unsuccessful in its results, was most valuable as an experiment. Like others which I have seen, it affords proof that water *does* enter the chest; that before air can be introduced the water must be removed; and that for this purpose no method hitherto suggested can equal the Marshall Hall method, as it is both simple and sure to effect its object. Moreover, it proves that the application of the Marshall Hall method for no more than two to five minutes, as proposed by the committee of the Medico-Chirurgical Society, will not suffice to clear the lungs.

Stretching the pectoral muscles, by raising the shoulder, undoubtedly increases the inspiratory action; but in issuing rules *to the public* I think this is better omitted, as tending to confusion; whereas it is impossible for anyone to misunderstand the simple instructions of the Marshall Hall method.

The general press now almost daily records cases of death by drowning, in which, because the *appearance* of death is present, its reality is assumed, and no intelligent efforts in the way of resuscitation are made, although in many instances the bather has only been missed for a very few minutes.

I would suggest that the profession should press upon local authorities the urgent importance of having a good boatman at much frequented bathing-places, who should be well instructed (drilled from time to time) in the Marshall Hall method; so that, whilst the medical man on his arrival may adopt other means as he thinks proper, the most important step will already have been taken.

In the case now recorded, the boatman did nothing but convey the body along shore for half a mile in his boat, instead of at once going ashore and commencing the work of resuscitation.

I am, Sir, yours obediently,

Folkestone, August 28th, 1871. ROBERT BOWLES.

* The mode of conducting a qualitative analysis of drinking water, given in Parkes's Practical Hygiene, is so simple that anyone may readily satisfy himself as to the purity or impurity of a given specimen.

THE GRIEVANCES OF A PUBLIC VACCINATOR.

To the Editor of THE LANCET.

SIR,—At this time, when so much is written and talked against vaccination, the following remarks will show how Government officials help to encourage us in our work.

Up to last year the vaccination of the whole of this district was most thoroughly done. I have from about seventy-five to ninety births in the year in my district and about thirty births in a workhouse I hold, altogether some 120 children to vaccinate. My rule was to vaccinate one morning in every week. Should no children be brought I took some lymph in tubes and waited until the following week, when, if no children were brought that day, I always knew where one or two were to be found, so I visited them

and vaccinated at their own homes. Thus my lymph was never more than one week old, and having always some fresh lymph by me, directly a child was brought into the receiving ward of the workhouse I used to examine its arm if it had been vaccinated; if not, then I immediately vaccinated it; so that by that means I secured a great many wandering cases. One day I received a curt note appointing me to meet a certain official to inspect my district. This old gentleman informed me that, though he could find by the registrar's returns that I had not six children in my district unvaccinated, still my system was altogether wrong, and he would have me only vaccinate during two months in the year, because these "cases would be done from arm to arm." I represented that my plan had always worked well, and that nine out of ten were done from arm to arm. He pooh-poohed me, and gave orders which I was compelled to obey. And now for the results. Out of fifteen children who were in the workhouse, three only have I succeeded in vaccinating. They were the only ones remaining in the house. Again, August is my month to vaccinate. Many children were only two months old in February, so that they were not vaccinated. July comes, and the parents get notice from the prosecutor that unless the certificate of successful vaccination be sent within fourteen days they will be summoned. They immediately come to me. I say, "I only vaccinate in August and February"; and I have to write to the prosecutor. August comes, and with it I get my supply of lymph from the National Vaccine Establishment. I vaccinate with it. The first supply fails. My assistant at a distant branch has a supply at the same time. His fails. I get a second; he also. Both these fail. And thus two precious weeks are lost of this month, August. The people are vexed, and I am disgusted. This impartial old gentleman, when he made this alteration last year, at the same time visited two other public vaccinators. One of them was a hard-working man, who had done his work most thoroughly; the other had not nearly so large a district. The latter told me he had had the inspector down, and "that he had got three children for him to look at." On the strength of those three children he got a large gratuity; the other man got nothing, though he showed twenty children all with four marks, and done to the "perfect satisfaction" of our old gentleman. The one gave a luncheon, the other did not. I only know both as brother professional men, but I know it is true to the letter.

The deductions that I would draw from these remarks are as follows:—

1st. That inspectors should take into consideration that different localities require different working.

2nd. That the National Vaccine Establishment should be a little more careful in the lymph they send, when failure of it causes so much trouble, loss of time, and vexation.

3rd. That all public vaccinators should know upon what basis the gratuities are granted, in order that they may lay themselves open to obtain them.

Your obedient servant,

FUSBOS.

BIRMINGHAM.

(FROM OUR OWN CORRESPONDENT.)

THE health of this town is not so good as it was in the past month. Diarrhœa has sent up the death-rate from 17 to 27, the mortality being chiefly among infants. Small-pox is still prevalent, though not to any great extent. The new ward which the committee of the Queen's Hospital opened for these cases has soon been called into requisition, and we understand that one death has taken place from that disease in a man who had been vaccinated in early life, but in whom the cicatrices were ill-defined. The only other fatal case during the last week occurred in an unvaccinated female infant, aged one year.

At Stafford, the disease has appeared in a virulent form, and several deaths have occurred. The plans for a new hospital for infectious diseases have been approved by the Local Government Board, and the building will be at once commenced. In the meantime every effort is being made to improve the sanitary condition of the town. Water-carts are sent round the town every night with an abundant supply of diluted carbolic acid for free distribution. Some disinfecting powders and whitewash brushes are also supplied gratis to any of the poorer inhabitants.

In many of the suburbs of Birmingham grave complaints are being made by the inhabitants, of ditches filled with stagnant water, of unclean pigsties, and other unsavoury and objectionable accumulations of filth, for which the boards of guardians seem unable to afford an adequate remedy. Many of these suburban districts, as Handsworth, Erdington, and others, are so populous that a local board of health ought to be established without delay; then the management of the drains and sewers would be under their own immediate control, and it would be their own fault if there existed the same grave causes for the complaints which now are heard on all hands. That there are good grounds for inquiry into the sanitary state of this district cannot be doubted, but it is only when cholera is imminent, and the premonitory warnings afforded by diarrhœa are already present, that people realise the importance of this subject, and the necessity of paying attention to ventilation, to cleanliness, and to an abundant supply of pure water.

The British Medical Association having determined to make Birmingham its meeting-place for 1872, no time has been lost in obtaining subscriptions to enable the President, Mr. Alfred Baker, to entertain the Association. Owing to the indefatigable exertions of the branch secretary, Mr. Bartleet, the handsome sum of £500 has been guaranteed already, and that almost exclusively by the medical men of the town. When those of the district surrounding have responded to the appeal which has recently been issued, a much larger sum will doubtless be forthcoming, so as to enable the president to entertain the Association with the utmost liberality.

The coroner's inquest on the man poisoned by aconite ended in the following verdict:—"The jury are clearly of opinion that aconite was taken by the deceased in consequence of the mistake of Mr. H. Hunter, for which he is highly censurable; but they are not satisfied that aconite was the cause of death. The jury regret that Mr. Hoare did not give the deceased his immediate personal attendance; and they likewise consider that in all cases where poisons are sent out the labels upon them should be printed in conspicuous colours, and not written." The evidence of Dr. Hill, the borough analyst, showed that aconite was found in the phial labeled "Linctus, to be taken as before," and also in a phial labeled, "Liniment—Poison"; but he did not detect aconite either in the vomit or in the stomach. He could not say that aconite caused death, but that, as the man's age was seventy-one, and his heart was the seat of fatty degeneration, a small quantity, such as would have floated on the top of the liniment, might have been sufficient to prove fatal.

The Sewage Inquiry Committee have engaged the services of Mr. T. Hawksley, C.E., to assist them in their labours.

An endeavour is being made to induce the borough coroner, Dr. Birt Davies, to hold inquests on those who die from accident in the General Hospital, either in the physician's consulting-room, or in some other suitable room in that building, instead of at an inn situate half a mile from the hospital. The hospital authorities have given their sanction, and it is to be hoped that Dr. Davies will soon be induced to act in conformity with the wishes of the public.

Birmingham, August 29th, 1871.

IRELAND.

(FROM OUR OWN CORRESPONDENT.)

THE SANITARY STATE OF KINGSTOWN.

THE sanitary condition of Kingstown, the most fashionable watering-place of Ireland, situated only half-a-dozen miles from Dublin, is truly in a lamentable state. The Vartry water—a purer water does not exist—is in the township, but is not taken advantage of sufficiently by the poorer classes, simply because it would entail a trifling expense to introduce it into their houses. Besides this absence of good water, the drainage of the town is still

extremely bad, the effluvia on evenings when the weather is warm being something absolutely fearful; indeed, no one who has not resided in Kingstown can form the slightest idea of the concentrated stench which invades every quarter of one's house during the summer evenings. In the back streets of the town also, the filth and offensive garbage decomposing in the sun, the dangerous refuse allowed to accumulate in ash-pits and out-offices, the overcrowding of the wretched inhabitants of the miserable cabins, and the bad ventilation, call for a vigorous application of sanitary measures, which, unfortunately, the Town Commissioners and their officers seem unable to cope with, although a Public Health Committee exists, with ample powers for carrying out the provisions of the Sanitary Act. Should cholera unfortunately make its appearance, it would be absurd to say Kingstown is prepared for it; it is not, and until the sanitary officers, the police, the commissioners of the township, and others in authority do their duty, there will be a heavy responsibility upon those who have refused to discharge the trust reposed in them for the benefit of their fellow-creatures.

THE FOOT-AND-MOUTH DISTEMPER.

Dr. Cameron, the city analyst, has submitted a report to the Public Health Committee of the Corporation of Dublin, relative to the danger of those who drink the milk of cows affected with foot-and-mouth disease. He states that pigs, to whom this kind of milk has been given, have died from its effects; that several cases of ulcerated mouths from its use have occurred among human beings; and that the children of two families, with whom he was acquainted, had extensive aphthous patches on their mouths and lips, produced by the use of milk obtained from animals suffering from the distemper. He recommends boiling the milk before using it, as by this means the danger is greatly lessened, if not altogether obviated.

Dublin, Aug. 29th, 1871.

PARIS.

(FROM OUR OWN CORRESPONDENT.)

HEALTH CONDITION OF PARIS.

THE health condition of Paris remains about the same as it was two or three weeks ago. No single case of Asiatic cholera has been observed. The weekly bulletin of deaths for the week ending August 26th mentions only one case of home cholera; that for the week ending August 19th no case; and the one for the week ending August 12th a single case. Cholerine has somewhat increased, the three bulletins referred to mentioning successively 4, 19, and 31 cases. On the other hand, diarrhœa, which was put down at 80 during the week ending August 12th, only figures at 55 for the week ending August 26th.

The authorities are actively adopting all measures of precaution for providing against the incursion of a choleraic epidemic. The best means of surveillance compatible with the Prussian occupation have been adopted on the eastern frontiers, whilst M. Fauvel, head inspector of the Health Service, has been sent down to the South of France to see that the quarantine ordinances are carefully carried out. Medical opinion in Paris is much divided touching the probability of cholera extending itself to the western part of Europe, some medical men forming a favourable opinion from the fact that the epidemic in Russia is dying out, and has been comparatively mild, whilst others augur ill of the present "medical constitution" in France, Holland, Belgium, England, &c.

The total number of deaths per week in Paris does not exceed the ordinary average. The weather is exceedingly fine, somewhat hot during the day, but cool and pleasant, and even chilly. in the morning and evening.

ALCOHOL AND ABSINTHE.

There has been within the last few years much controversy touching the noxious properties of absinthe, some medical writers attributing a special injurious power to the substance, whilst others ascribe the evil effects consequent on absinthe drinking exclusively to the alcohol which enters into the composition of the liquid. This much vexed question has been considerably elucidated by the researches of M. Magnan, head physician to the lunatic asylum of St. Anne, who has had a very wide field for observation, and whose clinical and experimental researches on the subject seem to be very conclusive. In 1869 M. Magnan had already published a note, in which he pointed out the distinctive features of the consequences which result from the excessive use of alcohol and absinthe. Since then the observation of about 250 fresh cases has enabled him to confirm the conclusions at which he had previously arrived. From the mass of information which has thus been brought to bear upon the question we gather the following important statements, thus briefly summed up:—(1) Subjects suffering from acute acoholism with epileptic attacks are almost invariably addicted to the excessive use of absinthe. (2) Patients suffering from acute alcoholism without epileptic fits, but with trembling, whatever its degree of intensity, habitually drink wine or brandy. (3) It may therefore be put down in a general way respecting acute alcoholism, that alcohol produces delirium and trembling, whereas absinthe (alcohol and wormwood) brings on delirium, trembling, and epilepsy.

HEALTH OF M. THIERS.

Many reports are current touching the health of M. Thiers, who is represented to be more or less seriously unwell. The fact is that the Chief of the Executive Power in France is not suffering from any special symptoms of disease, but that his general health, as might be expected, has been somewhat enfeebled from the wear and tear of the arduous work and great anxiety which he has undergone. His sight, however, has been failing much of late, and Dr. Desmarres (the well-known ophthalmologist), who has been consulted, has earnestly advised M. Thiers to take some rest, and especially to abstain from all work by night, lest the sight of the right eye be soon completely lost.

Paris, August 29th, 1871.

NEW YORK.

(FROM OUR OWN CORRESPONDENT.)

PHARMACEUTICAL LEGISLATION IN AMERICA.

THE apothecaries and druggists of New York are in a state of great excitement. Until last winter there were no enforced regulations as to the qualifications of druggists or druggists' clerks; consequently the profession was reduced to a mere trade. The most ordinary mistakes were of frequent occurrence, and deaths from ignorance of the apothecary were not seldom returned by the coroner's jury. The New York Legislature passed an Act, March 23rd, 1871, designed to remedy these evils by establishing a Board for the Examination and Licensing of Druggists and Prescription Clerks. The Act provides that the Mayor shall appoint a board consisting of one skilled pharmaceutist, one practical druggist, and two regular physicians of the city of New York, to hold office during the pleasure of the mayor; this board shall examine all druggists, and all persons now employed or hereafter to be employed as clerks by any druggist, keeper, proprietor, or superintendent of any drug-store in the said city, who shall be engaged in preparing and putting up physicians' prescriptions, or dispensing medicine. After six months from the date of the organisation of the board, any person attempting to act as a druggist without having the certificate of this board shall be fined not more than 500 dollars, or imprisoned not longer than six months, or both. This board was duly appointed by the mayor, and proceeded to organise. It fixed the fee for licences as follows:—Licence for a druggist, thirty dollars; licence for prescription clerk, ten dollars. Notice was then given of the time of examination, and the fraternity of druggists were requested to appear and submit to the ordeal. It is estimated that there are 438 druggists and 1300 druggists' clerks now in the city. Hostility to this board immediately showed itself among the educated druggists who held the diplomas of the New York College of Pharmacy. They asserted that, as they had complied with the old law, requiring druggists to obtain a diploma from this College, they should not be subjected to an examination, but this diploma should be received as evidence

of their qualification. The new board replied that the law under which it was acting made no such exceptions as they suggested, but was imperative in its requirements that all persons now engaged, or hereafter to be engaged, in the business must obtain a licence from that board. The druggists yielded the point, and are now undergoing the requisite examinations. Thus far about one-third of the applicants for examination have failed to receive the licence. It is generally believed by the better class of apothecaries and druggists that this law, if rigidly enforced, will tend powerfully to elevate the character of the business, as well as prevent the almost daily errors heretofore occurring, by removing the incompetent, and hereafter guarding against the admission of uneducated persons to their professional ranks.

New York, August 10th, 1871.

THE CHOLERA.

THE special meeting convened by Dr. Buchanan, in connexion with the port of London, was held at Whitehall on the 25th ult., and the following resolutions were carried unanimously:—1. That this meeting of representatives from the various boards and districts abutting on the Thames recognises the advisability of a joint action in appointing a sufficient staff of officers for the inspection of shipping, for the provision of the necessary hospital accommodation in cases of cholera, and for the disinfection of the shipping and infected articles, under the recent orders in Council. 2. That application be at once made to the Government for the use of one of her Majesty's ships, to be used as a hospital, below Gravesend, for patients suffering from cholera on board ship. 3. That this meeting forms itself into a conjoint committee for taking the necessary action for the inspection of shipping in the river Thames, and to adopt such measures for the treatment of persons affected with cholera, and to prevent the spread of the disease, and to take such other measures as may be deemed needful. 4. That the following gentlemen form a sub-committee:—T. Troughton, Esq. (Mayor of Gravesend), G S. Pedler, Esq., W. P. Jackson, Esq., J. Lloyd, Esq., G. L. Shand, Esq. Dr. Meymott Tidy was requested to act as secretary.

The Mayor of Gravesend presided at the meeting, and the sub-committee will meet to organise a scheme of inspection on Monday next at the Guildhall. All the districts interested were represented at the meeting except West Ham, Rotherhithe, and Poplar, and Dr. Buchanan anticipates obtaining their adhesion to a united plan of action.

The Board of Trade have asked for information from the Liverpool Board of Health as to the extent of their authority in the way of restricting immigration from countries in which cholera is rife.

The Seamen's Hospital Society have applied to the Admiralty for permission to locate any cases of cholera that may be brought to their institution on board the *Dreadnought*, but have been informed by their lordships in reply that, as the ship is lent to the Metropolitan Asylums Board, they are unable to comply with the request.

Dr. W. T. Gairdner, the medical officer of health for Glasgow, has published a valuable series of recommendations with reference to hospital accommodation, disinfectants, &c.

All vessels arriving at Madrid from England, Scotland, and Ireland are subjected to a quarantine of three days' duration on account of cholera.

As an additional precaution, with a view to the prevention of cholera, Major-General Brownrigg, C.B., commandant at Chatham garrison, has given orders that the men are to place their beds and bedding in the open air, for three hours at least, twice a week.

Telegraphic intelligence from Königsberg records that from the 18th to the 25th ult., 329 persons died from cholera. On the 28th 100 cases and 29 deaths are reported; on the 29th, 79 cases and 50 deaths.

At Elbing, up to Sunday 34 persons had been attacked and 20 had died.

Cholera appeared at Altona on the 19th, and up to the 26th inst. 16 persons had died of it.

The Registrar-General, in his weekly report, makes lengthy comments on the epidemic, urges the importance of procuring medical aid as soon as diarrhœa commences, and anticipates that in the ordinary course of events the disease may be expected to visit us some time next year.

Mr. Netten Radcliffe, the medical inspector of the Privy Council, has been actively engaged during the past week in visiting the south-eastern ports, and inaugurating preventive courses of action. Dr. Home, V.C., C.B., the newly appointed inspector, has made special visits to Goole and Grimsby, having the same object in view.

At the last meeting of the Health Committee of Liverpool it was agreed to accept the offer of the Dock Board to allow the Health Committee the temporary use of a plot of land on the east of the Lancashire and Yorkshire Railway and south of the canal locks in Lightbody-street, for the purpose of erecting sheds, if required, for hospital purposes in infectious cases. No rent will be charged, but the committee will occupy the land as tenants at will. Communications were submitted from the Board of Trade, calling attention to the instances which occurred in 1866 of cholera being introduced by emigrants at Hull and other eastern ports, and requesting to be informed of any arrangement made to meet a similar contingency should it occur. Dr. Trench said that at present there was no provision made for the hundreds of emigrants that might come to Liverpool, and there was no power to detain them unless they were suffering from cholera or choleraic diarrhœa. There was some doubt as to the powers of the committee over the owners of vessels; and it was resolved that the medical officer and the town-clerk should communicate with the Privy Council on the subject.

The Times correspondent at Berlin, under date August 23rd, writes in a manner by no means assuring. The central and north-western provinces of Russia continue to be ravaged by cholera. Suwalki, a province bordering upon East Prussia, is mentioned as one most severely stricken by the plague. In the extreme east of Prussia Königsberg remains the hotbed of the epidemic, there being 130 deaths from cholera in that city for the week ending the 18th ult. —about three times as many as occurred in the week previous. The police authorities throughout Prussia have been instructed to pay particular attention to the condition of drains and cesspools, and to see that they are frequently cleaned out and deodorised. *The Times* correspondent truly says that "it will be an herculean task to cleanse the Augean stables of Berlin." This is indeed true, and it is a most melancholy fact that the city which many would regard as the metropolis of scientific medicine should lag so far astern in the practice of hygiene and sanitation.

According to a telegram received at the office of the *Shipping Gazette* on Tuesday, the report that Asiatic cholera had broken out at Antwerp is officially contradicted.

Obituary.

WILLIAM CRISP PECHEY, M.D., M.R.C.S.

Dr. PECHEY was born at Biggleswade, Beds, Dec. 17th, 1838. Educated first at Hill House, Bracondale, and afterwards at Mr. West's, Amersham, he passed some time as pupil with Mr. Foster, of Huntingdon, and finally became a student at the London Hospital. Diligent as a student and devoted to anatomical and natural history pursuits, he was appointed one of the yearly prosectors at the college; and had his health been good, would probably have taken a high position in London. Unhappily, an attack of hæmoptysis drove him from England, and, after several voyages to Australia and India, he settled in 1863 in New South Wales, first at Rockleigh, and afterwards at Fort Bourke. Here, with a practice of about 100 miles' radius, thrown entirely on his own resources, he lived a life of interest and excitement, with ample opportunities for prosecuting his favourite pursuits. In 1868 he returned to England, but increasing illness compelled him soon to leave again for a warmer climate. Having sold his Australian practice, he attempted this time to settle in the Figi Islands, where he hoped the possession of a cotton plantation would afford him ample leisure to study the rich fauna of the place.

The climate, however, was ill-suited for him. He returned to England, where, after lingering some few months, he died at the house of his mother, at Walthamstow, on the 22nd June last. He has left nothing behind him except a not inconsiderable museum, the results of his collecting in various places, especially rich in Australian birds, and a little work on the Figi Islands, published only a short time before his death, and giving a remarkably graphic and sensible account of the aspects and opportunities of those rising colonies.

Medical News.

UNIVERSITY OF LONDON. — The following is a list of gentlemen who have passed the recent Honours examinations:—

FIRST M.B.

ANATOMY.

FIRST CLASS. — Edward Albert Schafer, Univ. Coll. (Exhibition and Gold Medal); Henry Seymour Branfoot, Guy's (Gold Medal).

SECOND CLASS. — Charles Alfred Rayne, Univ. Coll.; Edward Markham Skerritt, B.A., Univ. Coll.

PHYSIOLOGY, HISTOLOGY, AND COMPARATIVE ANATOMY.

FIRST CLASS. — Edward Albert Schafer, Univ. Coll. (Exhibition and Gold Medal); Edward Markham Skerritt, Univ. Coll. (Gold Medal).

ORGANIC CHEMISTRY, AND MATERIA MEDICA AND PHARMACEUTICAL CHEMISTRY.

FIRST CLASS. — Henry Seymour Branfoot, Guy's (Exhibition and Gold Medal); Charles Firth, St. Bartholomew's (Gold Medal); Arthur Buchanan, Guy's.

SECOND CLASS. — Charles Alfred Rayne, Univ. Coll.; Andrew Dodson, Queen's Coll., Birmingham; Geo. Francis Kirby Smith, Guy's; Edward Albert Schafer, Univ. Coll.; Edward Markham Skerritt, Univ. Coll.

FIRST B.Sc. AND PRELIMINARY M.B. CONJOINTLY.

CHEMISTRY.

FIRST CLASS.—John William Elwes (Prel. Sci.), Univ. Coll. (Exhibition).

SECOND CLASS. — James Richmond (First B.Sc.), Manchester Grammar School; Robert William Atkinson (First B.Sc.), Univ. Coll. and Royal School of Mines.

THIRD CLASS. — Samuel David Titmas (Prel. Sci.), Univ. Coll.; Joseph Cooke Verco (Prel. Sci.), St. Bartholomew's; Thomas Carnelley (First B.Sc. and Prel. Sci.), Owens Coll.; Edward Ferrand (Prel. Sci.), St. Bartholomew's; Cyril Lloyd Jones (Prel. Sci.), Guy's; John Geoffrey Langley (Prel. Sci.), Univ. Coll.

ZOOLOGY.

FIRST CLASS.—John Charles Saunders (Prel. Sci.), Downing Coll. (Exhibition).

SECOND CLASS.—Charles Edward Harrison (Prel. Sci.), St. Bartholomew's; Baron Armand De Watteville, M.A. (First B.Sc. and Prel. Sci.), Univ. Coll.

THIRD CLASS. — Cyril Lloyd Jones (Prel Sci.), Guy's; Edward Joshua Edwardes (Prel. Sci.), private study.

EXPERIMENTAL PHYSICS.

SECOND CLASS.—John Henry Poynting (First B.Sc.), Owens Coll.; Robt. William Atkinson (First B.Sc.), Univ. Coll. and Royal School of Mines.

THIRD CLASS. — James Richmond (First B.Sc.), Manchester Grammar School.

BOTANY.

FIRST CLASS. — Spencer Le Marchant Moore (Prel. Sci.), Univ. Coll. (Exhibition).

THIRD CLASS.—Augustus Joseph Pepper (Prel. Sci.), Univ. Coll.

APOTHECARIES' HALL. — The following gentleman passed his examination in the Science and Practice of Medicine, and received a certificate to practise, on Aug. 24th:—

Newberry, William John, Liverpool-road, Holloway.

On the same day the following gentlemen passed their first professional examination:—

William Wood Dickinson, Guy's; William Thorne Hamlin, St. Mary's; Aurelius Victor Maybury, St. Thomas's.

ST. BARTHOLOMEW'S HOSPITAL PRIZE-EXAMINATIONS, 1870-71.—Jeaffreson Exhibition (£20 per annum for two years): E. Cretin.—Senior Scholarship in Medicine, Materia Medica, and Therapeutics (£75): H. E. Bridgman, W. Furner, and T. Strafford, (æq).—Senior Scholarship in Anatomy, Physiology, and Botany: C. Firth and R. W. Leftwich.—Junior Scholarships: E. Cretin (£50); P. H. Dicken (£30); A. F. Stevens (£20).—Kirkes Medal: D. P. James.—Bentley Prize: H. Taylor.—Wix Prize: H. E. Bridgeman.—Hitchens Prize: F. E. Jackson.—Foster Prize (Practical Anatomy, Sen.): P. Benson.—Treasurer's Prize (Practical Anatomy, Jun.): G. Andrew and S. Verco.

THE library of the Obstetrical Society will be closed from Thursday, the 7th, to Wednesday, the 20th of September, both days inclusive.

THE Royal College of Surgeons of England have issued a notice that certificates of professional education of candidates for the Fellowship and Membership of the College, for the year commencing the 1st of August, 1871, will be received from the following schools and hospitals in the British dependencies, colonies, and foreign countries, as well as those recognised by the Royal College of Surgeons of Edinburgh, and that in Ireland—namely, the Medical College of Bengal; the Medical College of Madras; the Grant Medical College, Bombay; the University of Toronto; the University of Victoria College, Toronto; the University of McGill College, Montreal; the Royal College of Physicians and Surgeons, Kingston, Canada; the University of Laval, Quebec; the University of Melbourne; the Melbourne Hospital; University of Sydney; the Sydney Infirmary; the General Hospital, Hobart Town; the General Hospital, Launceston, Tasmania; Paris; Montpellier; Strasburg; Berlin; Vienna; Heidelberg; Bonn; Göttingen; Wurzburg; Leyden; Liège; Pavia; Pisa; Royal Caroline Institute, Stockholm; Copenhagen; New York; Philadelphia; Harvard University; Cambridge; and Boston.

TAPPING IN GASEOUS INTESTINAL DISTENSION.—M. Fonssagrives, Professor at Montpellier, has communicated to the Academy of Medicine of Paris a valuable paper on this operation, which, as we all know, is often performed in veterinary surgery. It is said that in Bolivia it is often had recourse to. The best instrument is a grooved needle; but the author has used with success a simple hydrocele trocar. M. Huguier employs a very sharp needle playing in the canula of a trocar; this needle merely separates the intestinal fibres without dividing them, and prevents the escape of gas or fluid into the peritoneum. When the distension recurs the tapping may be repeated. Numerous operations are not more dangerous than one, as is clearly shown by eighty-four cases collected by the author. M. Fonssagrives cites several examples where asphyxia was imminent by the pushing up of the diaphragm. He thinks that this tapping could be used with advantage in strangulated hernia to facilitate reduction, either before or after kelotomy, especially when aspiration is combined with the artificial freeing of the gas.

THE HEALTH OF THE SWISS ARMY.—According to the report of General Herzog, which has recently been presented to the Federal Council, the sanitary condition of the Swiss army during its recent occupation of the frontiers has been fairly good. There were 4224 cases of sickness, of which 3528 were in a short time convalescent. There were less than 700 cases of serious illness, and only 17 deaths on service and in the hospitals, notwithstanding the extreme severity of the winter. The report goes on to say, "If the hospital staff had but few of our soldiers under their charge when stationed on the frontiers, they did not the less find occasion for their services when the French army of the East took refuge on Swiss territory. The surgeons attached to ambulances Nos. 7, 10, 11, 12, 13, 14, and 15, devoted themselves, with praiseworthy zeal, to the relief of the sufferers, offering a striking contrast to the selfish conduct of the French surgeons, who (with a few honourable exceptions) basely refused to apply their professional skill in relieving the necessities of their own countrymen."

CURIOUS MEDICAL FEES.—The executors of the late Mr. Richard Shaw, of Abergavenny, lately brought an action against Mr. Freeman Franco, a surgeon practising in Crickhowell, to recover £7 12s. for goods sold and delivered. Defendant admitted the demand, but claimed a set-off of £5 8s. for professional advice during 1869 and 1870; the charge for the former year being £1 1s., and that for the latter (consisting principally of two items of £2 2s. for "Long research on Gout," and £1 1s. for "Five pages of advice on Gout and Consultation") amounting to £4 7s. From the evidence it appeared that defendant when he visited Abergavenny used to call upon the late Mr. Shaw as an old friend; and that he had then said he would send Shaw a recipe for the gout, from which complaint he suffered. Defendant had frequently been heard to say he would charge Shaw nothing for his "Advice on Gout," and that if he could cure him he should make a fortune. Nothing had been heard of the set-off until the matter came before the court. His Honour, in giving judgment, said the claim did not come much recommended by the way

in which it was made, the set-off not having been made as required by the statute. He had always understood that when a professional man made researches in matters connected with his profession, the research that he made was information added to his capital, and from which he supplied himself for the purpose of giving advice on the case before him. The defendant no doubt was entitled to be paid for the advice he had given, but not for the time expended to qualify himself to give that advice. The defendant had said that he did not intend to charge anything for his advice; but he would allow him £2 2s., and give plaintiff judgment for £5 10s.

ASSAULT BY A MEDICAL MAN.—We are sorry to report that Dr. Marion Sims has recently been sentenced to pay a fine of 100 francs, and damages to the amount of 300 francs, for an assault on Dr. T. W. Evans, committed on August 26th, 1870. It appears that Dr. Evans was president of the American International Sanitary Committee, of which Dr. Sims was one of the surgical staff. At a meeting of the committee, at which both Dr. Evans and Dr. Sims were present, a slight disagreement arose as to the advisability or not of despatching an ambulance at once to Metz. Dr. Evans thought one way and Dr. Sims (who was only present by courtesy, not being a member of the committee) another. It was then proposed to elect Dr. Sims a member of the committee, but Dr. Evans objected to this as being an unsatisfactory way of settling the question at issue. Dr. Sims then assaulted Dr. Evans, dealing him a heavy blow which knocked him down and caused him to bleed profusely. The case would have been brought to trial at an earlier date had not Dr. Sims been absent in America. It is greatly to be deplored that two medical men so distinguished as those in question should appear before the world under so unfavourable an aspect, and we regret exceedingly that the differences of these two gentlemen could not have been settled out of Court.

Medical Appointments.

ALEXANDER, R. G., M.B., has been appointed Physician to the Infirmary and Dispensary, Bradford, Yorkshire, vice Walter Bourne, M.D., resigned.

CHALMERS, J. E., M.R.C.S.E., has been appointed Medical Officer for the Danby District of the Guisborough Union, Yorkshire, vice A. Cameron, L.R.C.P.Ed., L.F.P. & S. Glas., resigned.

CURRAN, H. G., L.K.Q.C.P.I., has been appointed Medical Officer for District No. 3 of the Bodmin Union, vice Carter, resigned.

HARRIS, J. A., M.B., M.R.C.S.E., has been appointed Assistant Medical Officer to the Millroad Workhouse, Everton, West Derby Union, vice O. S. Shaw, M.R.C.S.E., deceased.

HORNIBLOW, W. R., M.D., M.R.C.S.E., has been appointed Medical Officer for District No. 2 of the Chelmsford Union.

HORTON, H., M.R.C.S.E., has been appointed Medical Officer and Public Vaccinator for the Eardisley District of the Kington Union, Herefordshire, vice A. B. Lomax, M.R.C.S.E., deceased.

MACEWEN, W., M.B., C.M., has been appointed Casualty Surgeon for the Central Division of the Glasgow Police, vice Wm. McGill, M.D., L.R.C.P.Ed., resigned.

MACLACHLAN, J., M.D., has been appointed Medical Officer of Health for Walsall, Staffordshire.

MOORE, S. W., L.R.C.P.Ed., has been appointed Lecturer on, and Teacher of, Physiological Chemistry at St. George's Hospital.

MORISON, Mr. R. P., has been appointed House-Surgeon to the Hereford Infirmary, vice J. Beavan, F.R.C.S.E., resigned.

PAYNE, G. S., M.R.C.S., has been appointed House-Surgeon to St. Bartholomew's Hospital.

REED, W. H., M.R.C.S.E., has been appointed Medical Officer and Public Vaccinator for Districts No. 2A and No. 9 of the Honiton Union, Devon, vice A. L. Peacock, M.R.C.S.E., resigned.

SHEPHAM, Mr. G. W., has been appointed Surgeon to the Grantham District of the Great Northern Railway.

THOMAS, W. H., L.R.C.P., M.R.C.S., has been appointed Medical Officer of Health for Maesteg, Glamorganshire.

Births, Marriages, and Deaths.

BIRTHS.

CALDWELL.—On the 27th ult., at Richmond, the wife of J. Caldwell, M.R.C.S.E., Surgeon R.N., of a daughter.

CHARLTON.—On the 20th ult., at Eldon-square, Newcastle-on-Tyne, the wife E. Charlton, M.D., of a son.

COLLUM.—On the 20th ult., at Croy, Surbiton, the wife of R. Collum, M.D., of a son.

CONDON.—On the 21st of July, at Cawnpore, India, the wife of Dr. J. Hunt Condon, Civil Surgeon, Cawnpore, of a son.

CONDON.—On the 27th ult., at Charles Fort, Kinsale, the wife of Dr. E. Hunt Condon, 2nd Batt. 21st Royal Scots Fusiliers, of a daughter.

JAMESON.—On the 26th ult., at Granada-road, Southsea, the wife of Thomas Jameson, M.D., Surgeon R.N., of a son.

KERR.—On the 29th ult., at Dumfries, the wife of William S. Kerr, M.D., of a daughter.

MASSY.—On the 29th ult., at Netley, the wife of H. D. Massy, L.R.C.S.I., Staff Assistant-Surgeon Army, of a son.

SNAPE.—On the 22nd ult., at Rodney-street, Liverpool, the wife of Geo. H. Snape, M.R.C.S.E., of a son.

MARRIAGES.

GUNTHER—TOMPSON.—On the 15th ult., at St. Mary Magdalen, St. Leonard's-on-Sea, Dr. Theodore Gunther, of Hampton Wick, to Florence Georgina, daughter of the late Arthur Tompson, Esq.

MACAULAY—WRIGHT.—On the 24th ult., at Quorndon, Leicestershire, James Campbell Macaulay, M.R.C.S.E., of Cannock, Staffordshire, to Elizabeth Judith, second daughter of Thomas Tyrwhitt Wright, Esq., of The Bank, Leicester.

MAPLESON—JONES.—On the 29th ult., at the Parish Church, St. Marylebone, Horsley Mapleson, M.R.C.S.E., of Devonshire-street, Portland-place, to Annie Elizabeth, daughter of the late David Jones, Esq.

MATTHEWS—HARRISON.—On the 14th ult., at Christ Church, North Shields, John Matthews, M.D., of Tynemouth, to Isabella, daughter of the late John Harrison, Esq.

PHAYRE—EGAN.—On the 24th ult., at Rathgar, Alex. Phayre, L.K.Q.C.P.I., of Loughrea, to Mary Agnes, daughter of the late Wm. Egan, Esq.

DEATHS.

BEBBINGTON.—On the 22nd ult., Thos. Bebbington, L.F.P. & S. Glas., of Great Howard-street, Liverpool.

BARRACK.—On the 21st ult., at Brackley Villa, Bushey-hill-road, Camberwell, Dr. Alex. Barrack, aged 71.

BOLT.—On the 23rd ult., at Ramsgate, R. A. Bolt, M.R.C.S.E., of Blackman-street, Southwark.

ELLIS.—On the 21st ult., J. R. Ellis, M.R.C.S.E., of Mirfield, Yorkshire, aged 37.

FAVELL.—On the 25th ult., William Favell, M.R.C.S.E., of Leavy Greave, Sheffield, aged 75.

GREENHILL.—On the 20th ult., Duncan Greenhill, L.F.P. & S. Glas., of Main-street, Rutherglen, Glasgow.

GRYLLS.—On the 1st of July, at Cocanada, Madras Presidency, Wm. R. Grylls, M.R.C.S.E., Civil Surgeon, late of the Enniskillen Dragoons, aged 41.

HART.—On the 1st of July, at Bahrein, Persian Gulf, George V. Hart, Assistant-Surgeon H.M.'s Ship "Euphrates," on special service on board H.M.'s Ship "Magpie," aged 35.

KNOWLES.—On the 20th ult., Edmund Yalden Knowles, M.R.C.S.E., of Farnham, Surrey, aged 58.

MILLAR.—At Albany-street, Edinburgh, Christian D. D. Millar, the wife of John Millar, M.A., F.R.C.P.

Medical Diary of the Week.

Monday, Sept. 4.

ROYAL LONDON OPHTHALMIC HOSPITAL, MOORFIELDS.—Operations, 10½ A.M.
ROYAL WESTMINSTER OPHTHALMIC HOSPITAL.—Operations, 1½ P.M.
ST. MARK'S HOSPITAL.—Operations, 2 P.M.
METROPOLITAN FREE HOSPITAL.—Operations, 2 P.M.

Tuesday, Sept. 5.

ROYAL LONDON OPHTHALMIC HOSPITAL, MOORFIELDS.—Operations, 10½ A.M.
ROYAL WESTMINSTER OPHTHALMIC HOSPITAL.—Operations, 1½ P.M.
GUY'S HOSPITAL.—Operations, 1½ P.M.
WESTMINSTER HOSPITAL.—Operations, 2 P.M.
NATIONAL ORTHOPÆDIC HOSPITAL.—Operations, 2 P.M.
ROYAL FREE HOSPITAL.—Operations, 2 P.M.

Wednesday, Sept. 6.

ROYAL LONDON OPHTHALMIC HOSPITAL, MOORFIELDS.—Operations, 10½ A.M.
MIDDLESEX HOSPITAL.—Operations, 1 P.M.
ROYAL WESTMINSTER OPHTHALMIC HOSPITAL.—Operations, 1½ P.M.
ST. BARTHOLOMEW'S HOSPITAL.—Operations, 1½ P.M.
ST. THOMAS'S HOSPITAL.—Operations, 1½ P.M.
ST. MARY'S HOSPITAL.—Operations, 1½ P.M.
KING'S COLLEGE HOSPITAL.—Operations, 2 P.M.
GREAT NORTHERN HOSPITAL.—Operations, 2 P.M.
UNIVERSITY COLLEGE HOSPITAL.—Operations, 2 P.M.
ST. GEORGE'S HOSPITAL.—Ophthalmic Operations, 2 P.M.
LONDON HOSPITAL.—Operations, 2 P.M.
CANCER HOSPITAL.—Operations, 3 P.M.

Thursday, Sept. 7.

ROYAL LONDON OPHTHALMIC HOSPITAL, MOORFIELDS.—Operations, 10½ A.M.
ST. GEORGE'S HOSPITAL.—Operations, 1 P.M.
ROYAL WESTMINSTER OPHTHALMIC HOSPITAL.—Operations, 1½ P.M.
UNIVERSITY COLLEGE HOSPITAL.—Operations, 2 P.M.
ROYAL ORTHOPÆDIC HOSPITAL.—Operations, 2 P.M.
CENTRAL LONDON OPHTHALMIC HOSPITAL.—Operations, 2 P.M.
WEST LONDON HOSPITAL.—Operations, 2 P.M.

Friday, Sept. 8.

ROYAL LONDON OPHTHALMIC HOSPITAL, MOORFIELDS.—Operations, 10½ A.M.
ROYAL WESTMINSTER OPHTHALMIC HOSPITAL.—Operations, 1½ P.M.
ROYAL SOUTH LONDON OPHTHALMIC HOSPITAL.—Operations, 2 P.M.
CENTRAL LONDON OPHTHALMIC HOSPITAL.—Operations, 2 P.M.

Saturday, Sept. 9.

ST. THOMAS'S HOSPITAL.—Operations, 9½ A.M.
HOSPITAL FOR WOMEN, Soho-square.—Operations, 9½ A.M.
ROYAL LONDON OPHTHALMIC HOSPITAL, MOORFIELDS.—Operations, 10½ A.M.
ROYAL WESTMINSTER OPHTHALMIC HOSPITAL.—Operations, 1½ P.M.
ROYAL FREE HOSPITAL.—Operations, 2 P.M.
ST. BARTHOLOMEW'S HOSPITAL.—Operations, 1½ P.M.
KING'S COLLEGE HOSPITAL.—Operations, 1½ P.M.
CHARING-CROSS HOSPITAL.—Operations, 2 P.M.

Notes, Short Comments, and Answers to Correspondents.

THE STUDENTS' NUMBER OF THE LANCET will be published on Saturday next, September 9th. Those gentlemen holding official situations connected with Medical Institutions in the United Kingdom, who have not yet forwarded the necessary information to our Office for publication in that Number, are earnestly requested to send it *without the delay of a single post.*

PROFESSIONAL ETIQUETTE.

A FATAL case of uterine hæmorrhage occurred a few days ago in Newport, and led to an inquest. The jury returned the following verdict: "That the deceased died from uterine hæmorrhage, and the jury are of opinion that there was a want of proper attention on the part of Mr. Lewis, whose case the jury believe it was." There was a difference of statement as to whether Mr. Lewis had been engaged to attend the case or not. At any rate he was sent for on the Saturday, but was in the country at that time. His assistant went on the Saturday, and found the patient pregnant, but not in labour, and suffering from uterine hæmorrhage. It does not appear that this gentleman was a qualified assistant. He did not visit her again. On the Wednesday following the patient sent once more for Mr. Lewis, rather objecting to his assistant, Mr. Humpage. Shortly afterwards another messenger came, asking for the assistant to go. By this time he had been sent for to another case, and left word that if the patient (Mrs. T——) sent, the messenger was to be told that Mr. Humpage had gone to another case, and advised to get another doctor. Then came the difficulty of getting another doctor to regard the case as his own, for which he was responsible. We have often had to regret this situation, and the discredit which occasionally accrues from it to the profession. Without going into details here, we would lay down this rule, that an obstetric patient once seen by any medical man to be imperilled by uterine hæmorrhage is his patient, and no duty is more urgent on him than to do the best he can for her. All theories of irresponsibility or of the responsibility of someone else are out of place. Even an unqualified assistant is responsible as acting for his principal, and cannot exonerate himself until he has seen the case fully handed over to the care of another medical man. In the meantime his first duty is to the patient with hæmorrhage, to attend her till further assistance can be procured, and to do his best to procure that assistance, either as an act of kindness to his principal, or, failing this, to ask another medical man to regard the case as his own. We wish that Dr. Jennings, who was sent for, and who went to see the patient, had stayed by the case, and acted as if it were his own. It is very likely that no amount of care would have altered the result; but the verdict of the jury would have been different, and more creditable to the profession. We shall do right in such cases by keeping in view the bleeding patient—not saying, whose patient is this? but, what is my duty?

Mr. W. J. Smith.—The correspondence shall be inserted in an early number.

CHOLERA (?) IN NORFOLK.

To the Editor of THE LANCET.

SIR,—I will give you as succinctly as possible the history of a case of cholera (?), which terminated fatally at two o'clock this morning. The symptoms were almost Asiatic in character and severity.

About seven o'clock on Saturday evening I received a message, requesting my immediate attention to C. S——, a small farmer, residing on the outskirts of this town. State on examination: Almost pulseless; the facies Hippocratica strongly marked; quite deaf and almost blind; bathed from head to foot in a cold perspiration; surface blue, and a cadaveric odour very perceptible both in the breath and body exhalations. Both diarrhœa and emesis were more or less constant; the vomited matters being quite "rice-water" in character, and of a horrible fishy smell, not easily to be mistaken or forgotten. Five minutes after my arrival, severe cramps in both arms and legs, especially worse in left thigh, recurred every few minutes. He gradually got worse, and died, as before stated, at two o'clock this morning, without the faintest symptom of restoration from collapsed condition.

The treatment adopted was that I have proved to be eminently useful in all previous cases occurring in this county—viz., hot mustard-and-water pediluvia; envelopment of patient in hot blankets, with hot-water bottles under the axillæ, between the thighs, and at the extremities; constant friction and extension of cramped limbs being both enjoined and supervised personally; eggs and milk and sherry, whisked together, were given him to drink, and camphor and opium exhibited in small doses every half hour, but with unhappily no beneficial effect. I do not yet know if a necropsy will be allowed. I fear not.

Yours faithfully,
Cley-next-the-Sea, Norfolk, Aug. 27th, 1871. W. SUMPTER, M.D.

An Old Subscriber (Tenby, S. Wales) remarks—"It would be a great boon to many of your readers who do not possess a Dictionary of the Scientific Terms used in Medicine and Surgery if those gentlemen who send communications to you, and use such a word as *elytrorrhaphy*, would kindly give its Greek origin, and how to pronounce it."

X. Y., (Weymouth.)—Has our correspondent tried turpentine internally?

THE INDIAN FURLOUGH REGULATIONS.

WE are glad to perceive by the *Delhi Gazette* that the order preventing the regimental medical officers from availing themselves of the furlough regulations of the Indian military service has been rescinded, and that the surgeons of regiments are to be allowed to retain their charges on furlough, in accordance with the provisions of the regulations. The injustice as regards the civil medical officers, however, still remains in force. The Governor-General is of opinion that a medical officer in charge of a civil station should, when proceeding on furlough, retain a lien on some other similar appointment, but he should not, as a general rule, have any claim to reappointment to the same station. According to the Revised Civil Furlough Regulations, the civilian retains a lien on his substantive appointment, which the medical officer does not. The *Delhi Gazette* very properly remarks that, as to the medical officer's retaining "a lien on some similar appointment," it is *vox et præterea nihil*. The probability is great that there would be no appointment of a similar nature vacant on the return of the civil surgeon from furlough, or he might have to wait at a great loss for months for a vacancy.

Beta.—C might be justified in prescribing if the circumstances were very urgent, but not in taking a fee from the patient of a medical man who had left him in charge. A should have been more candid and explicit in explaining arrangements to B and C.

THE communication of *Dr. Argles* shall receive early attention.

CHLORAL HYDRATE AS A PREVENTIVE OF SEA-SICKNESS, AND AS AN ANTI-DIAPHORETIC.

To the Editor of THE LANCET.

SIR,—My brother, Urban Pritchard, M.D., and myself determined to investigate personally the effects of chloral hydrate during our recent trip to Norway and back. Our party consisted of five in number, one being a good sailor, the rest indifferent ones. Our first crossing was from Dover to Ostend, a passage of about five hours, which we made without chloral, the effect being great nausea, and in my case vomiting. Our next sea passage was from Kiel to Korsoer in the island of Zealand. On embarking, four of our party took each twenty grains of chloral hydrate, and slept soundly the whole of the six and a half hours' rough passage, waking up perfectly fresh, without the slightest symptoms of nausea or headache, which was a marked contrast to our fellow-passengers, who bore the symptoms of boisterous weather. The next time we used chloral hydrate was on our return journey from Christiania to Copenhagen, when we each took fifteen grains, which had the effect of quieting the stomach for some ten or twelve hours, when the effects subsided, and one of my brothers vomited severely, the rest of us feeling very sick. Our last trial of it was from Korsoer to Kiel, which was the roughest passage of all, the wind blowing "great guns." Here we again took fifteen grains, with the same delightful result of our first trial, in waking up *fresh* at the end of our journey, although, with the exception of one or two, all the passengers were ill the whole distance. I was awake part of the time, and, though the vessel pitched and tossed severely, I felt perfectly comfortable. We did not require the chloral between Os end and Dover, as the passage was extremely smooth and fine. If anyone would try its effects in repeated small doses on a longer voyage, I should much like to learn the result.

Last summer, during my recoveries from the several attacks of intermittent fever, I was troubled much with restless nights, combined with profuse perspiration, so excessive that it necessitated the drying of the bed-clothes &c. each morning. This continued several nights. The want of sleep induced me to take twenty grains of chloral hydrate, which not only gave me the desired rest, but entirely prevented the perspiration, which did not return on any succeeding night until after a fresh attack of marsh fever, when the old symptoms returned, but were at once checked by a fresh dose of chloral. This led me to try its effects on my patients in similar cases, of whom I had a large number, and I am happy to say with the same unvarying success. I have also tried it in perspiration produced by other causes, in every case of which it answered.

We have very little phthisis here, so I have not been able to give it a fair trial during the profuse sweating stage of that disease, and should feel much indebted to anyone who would try it, and let me know the result.

Before closing these remarks, I wish to mention that I find sulphate of chinchonine continues as successful a remedy in intermittent fevers as it proved last year.

I am, Sir, yours truly,
Sittingbourne, August 14th, 1871. G. F. PRITCHARD, M.D.

Mr. R. Green, (Templemore.)—We cannot undertake to reply to all our correspondent's queries. The age of a man is not always to be estimated by the years that he has lived; for some men have less physical and mental energy at forty-five or fifty than others have at sixty or seventy. We think, if our correspondent will call to mind the ladies of his acquaintance of the age of fifty-four or thereabouts, he will not fail to see that they have neither the activity nor the relish for active occupations that they once had, or that others under forty still have.

L.R.C.P. will find the subject of his communication noticed at length elsewhere.

THE IRON TREATMENT OF RHEUMATISM.

To the Editor of THE LANCET.

SIR,—I have been much interested in reading Dr. Wilson Fox's paper on the Treatment of Hyperpyrexia in Acute Rheumatism. In the first case it is stated that perchloride of iron was given at the commencement. No mention is made of the primary treatment in the second case, and I presume it was the same. As two cases ending fatally, with very similar symptoms, have lately come under my observation, in both of which the iron treatment had been carried out, I cannot help thinking that this method of treating acute rheumatism may in some way lead to these alarming results. I should be very glad to hear Dr. Fox's opinion on this point, and also as to the general results of the iron treatment of acute rheumatism.

I am, Sir, yours, &c.,
Reigate, August 24th, 1871. J. WALTERS, M.B., &c.

BAD FRUIT AND DIARRHŒA.

MR. CHARLES HASTINGS COLLETTE has earned a vote of thanks from all those interested in the sanitary welfare of the metropolis, and all those, therefore, interested in the extinction of preventable diseases. He has for many months and years watched the greed of Covent-garden stall-keepers, which has induced them to sell, at this season of the year, rotten fruit and vegetables to vagrant children, and so giving diarrhœa (if nothing worse) in exchange for coppers. His remonstrances have been received with scorn and derision; for Covent-garden market is under the ducal rule of his Grace of Bedford, and, except under very special circumstances, the profane tread of a metropolitan policeman is not allowed therein. But Mr. Collette, with legal astuteness, persevered, and eventually obtained a summons at Bow-street, the result of which ought to be very widely propagated; for if it is to be permitted that, in the preserves of a Duke in the precincts of London, poisoning by means of putrid food can be carried on without let or hindrance, ill fares the metropolis. We are informed that a good deal of despotism exists in this great fruit and vegetable market, and we think that the line of action adopted and maintained by Mr. Collette will expose, and may therefore assist to remove, other than sanitary abuses.

Mr. Fredk. Marsdin should apply to James F. Marson, Esq., Surrey Chapel, Blackfriars-road, on Tuesday or Thursday, at one o'clock.

Pusis should consult the late editions of Carpenter's or Kirkes' Physiology.

PROFESSIONAL DIGNITY.

To the Editor of THE LANCET.

SIR,—I shall feel obliged by your kindly allowing me, through the medium of your journal, to make an earnest appeal to the good feeling and high sense of honour which, I believe, exist among medical men, in the hope that some surgeons may be induced to abandon the objectionable and degrading system of keeping open shops as druggists. In a well-appointed house in a fashionable square there resides a gentleman whose door-plate informs us that he is "Mr. ——, Surgeon, &c." and who keeps in an adjoining street a druggist's shop, in which tooth-brushes, perfumery, corn-flour, *et hoc genus omne* are sold. In the same locality may be found another gentleman who describes himself as "Dr. ——, Surgeon and Accoucheur," and who is also the proprietor of a druggist's shop, in the fore-front of which "Tidman's sea-salt" figures as a prominent article of sale. Surely all this is *infra dig.*, and calculated to bring discredit on a noble profession. If surgeons *will* keep druggists' shops, then let them style themselves "Surgeon-Druggists," so that they may be distinguished from gentlemen who are merely practitioners, and not also retail vendors of druggists' sundries. They managed these things better in ancient Greece, where there was always a broad line of demarcation between Ἰατρὸς (prescribing physician), and Φαρμακοπώλης (druggist—i. e., seller of drugs).

I may add that no person can possibly be more opposed than I am to the system known as "counter-prescribing," because I am well aware that, in the vast majority of cases, it is simply pernicious folly.

Your obedient servant,
D. CARROLL, L.L.B.,
Arbour-villas, Stepney, Aug. 20th, 1871. Registered Druggist (Exam.)

To the Editor of THE LANCET.

SIR,—Some observations having been made lately in THE LANCET relative to open surgeries, allow me to make a few comments.

The Colleges must take the matter in hand if the shops are to be closed. But the Colleges cannot do everything; the spirit of the profession must be in the cause. Medical Societies should blackball all candidates who keep druggists' shops. The bye-law of the Colleges should be to the effect that members or licentiates should not dispense other prescriptions than their own or those of a medical man in consultation with them, nor should they deal in articles usually sold by druggists. I am a beginner, and have an open surgery, which I will readily close if I see leading practitioners, who live in mansions and drive carriages, close their little establishments that they keep open in a bye street for the sale of soaps, &c. There is the root of the evil. Again, do not hospital physicians dabble in drugs by sending formulæ to certain druggists to be made up? I know they do for a fact. The whole of the blame of shops does not by any means rest with the young men commencing practice. Nine out of ten would do without if the old-established men would give them a chance. I think, too, that a medical man keeping an *unqualified* assistant to prescribe in one of these shops, while he (the principal) is going his rounds, is unjust. It is, in fact, two men practising on one diploma.

Let us, then, form an association and give up our shops, and let the old men show the example; and now I am ready—if twenty other medical men with open shops will pledge themselves to do the same—to close mine after this year, and do all I can to get other twenties to follow in our steps. I have only had mine a few months, and it pays. Yours, &c.,
London, August 28th, 1871. A SURGEON.

P.S.—I enclose my name, and shall be glad to communicate with anyone on the subject.

"FAMILY HOUSES."

THE Administrator of the Gold Coast, reporting on the health of the colony in 1869, refers to the unwillingness of the natives to do away with dilapidated tenements. These, it seems, are invariably treated as sacred or "family houses"; but unfortunately this does not imply that they are kept clean, and the accumulation of dirt and animal matter around them creates a danger to health. It were well if there were no such "family houses" nearer home than the Gold Coast.

Mr. Gilruth, (Edinburgh.)—If our correspondent will forward his communication, it shall have consideration.

An Old Subscriber will find the information he requires in the fourth volume of "Holmes's System of Surgery."

Ventriloquist.—The qualifications are alike in value and significance.

THE GENERAL MEDICAL COUNCIL.

IT appears from the Annual Report of the Medical Officer of the Privy Council, just issued, that the following is the constituency of the General Medical Council:—*London:* College of Physicians, 235 voters; College of Surgeons, 24; Apothecaries' Society, 24; University of London, 36; total, 319.—*Scotland:* College of Physicians, Edinburgh, 61 voters; College of Surgeons, Edinburgh, 250; University of Edinburgh, 34; Faculty of Physicians and Surgeons, Glasgow, 110; University of Glasgow, 25; University of Aberdeen, 22; University of St. Andrews, 14; total, 506.—*Ireland* College of Physicians, 47 voters; College of Surgeons, 21; Apothecaries' Hall, 35; University of Dublin, 8; Queen's University, 25; total, 136.—Say for English Universities, 29; making about 1000 voters out of about 20,000 members of the profession. Of course the real *voters* at the English Universities are merely nominal, very few taking part in medical elections.

Mr. W. Anderson.—"Mr. Robert Sawyer" is quite sufficient, and "when unadorned is adorned the most." A visiting card is not meant to be a medical directory.

WE are compelled to postpone our notice on Bread-making.

THE STINGS OF INSECTS.

To the Editor of THE LANCET.

SIR,—I should be very thankful if any of your readers could give me an explanation of the pathological changes that take place after the sting of a bee or a wasp, and if there is any treatment that could be adopted in cases where life was in danger.

The other night I was called to see a young gentleman who was stung by a wasp that had found a hiding place in his sponge. The symptoms of which he complained, when they sent for me, were as follows:—Soon after the wasp had stung him, his arm began to swell, and he felt as if the whole of his head was swollen, and thought something must burst. This sensation was particularly severe around both his ears. At the same time there appeared over his face an eruption, which, as far as I could learn, was very like urticaria, and was very hot and painful. When I arrived at the house, all these symptoms had passed away, and he had partaken of some supper during the absence of the person who came for me. Just before I arrived he fainted, and was recovering when I saw him. I found him very much prostrated, though up to the time of his having been stung he was in very good health. Soon, however, he recovered, and has never felt any bad symptoms from it since.

I shall be very glad of any information that will throw light on this case, with any indications as to how to act if I were ever again called to a case that might be more serious. Yours respectfully,
Keighley, August 22nd, 1871. ARTHUR ROBERTS, M.R.C.S. Eng.

DREAMS.

One who has Suffered in like manner recommends "A Dream Martyr" to try the following:—"Cut the hair short; wear straw hat; sponge all over from crown of head to sole of foot with cold water the last thing at night; sleep on a mattress, and not in the same bed with his wife; abandon all stimulants, irritants, and excitants, as alcoholics, pepper, mustard, and hot sauces, also whatever article of diet causes any symptom of dyspepsia. Galvanism in gentle quantity every evening; give up tea, coffee, pie and pudding crust, salt meat and shell-fish. Take bromide of potassium, ten grains, morning and afternoon, and fifteen grains at bedtime; also a blue pill and black draught if necessary. If his teeth are in bad order, he must obtain an artificial set. If he begins to take chloral, he must be prepared for epileptic seizures."

ANOTHER correspondent says—"A Dream Martyr" would find great benefit by "refraining from all head-work, by giving up his practice for two or three weeks (or longer if it can be managed), and taking fifteen minims of the tincture of perchloride of iron three times a day between meals; by getting up early, and having a cold bath; by a short walk before breakfast. Let the diet be of a mixed nature, but not stimulating, and especially avoid all sedatives, hypnotics, narcotics, &c.; and, I might further add, procure change of air and scene."

M. P.—Tanner's work on the Practice of Medicine; Taylor or Guy on Medical Jurisprudence; Hillier on Diseases of Children. Any surgical instrument-maker.

M.R.C.S.—There is no other method of effecting it than by extracting the hairs.

A NEW CAUSTIC FOR MOTHERS' MARKS.

To the Editor of THE LANCET.

SIR,—It may not be uninteresting to some of your readers to call their attention to the following case which occurred lately in my own practice.

Mrs. W——, a young lady, during an early stage of her last pregnancy, received a strong mental impression by accidentally seeing a young girl with a large hairy mark on her face. The consequence was, that her own child, when born, was marked in a similar way. One half of the nose, the upper part of the left cheek, and over the left eyebrow half way on the forehead, there was a large hairy, corrugated, dark-coloured, ugly-looking mark. As an experiment, I tried the strong glacial carbolic acid with the most satisfactory result. I took four ounces of carbolic acid, B.P. (as manufactured by Dary, Yates, and Routledge), put the bottle in warm water till the acid liquefied, and then added a teaspoonful of diatilled water, in order to keep it from again crystallising. With this liquid acid I painted the mark twice a day, taking only a limited portion of the mark at one time. By repeated applications, a scab or crust formed, which ultimately scaled off, and left the skin beneath perfectly free from blemish, much to the mother's gratification. I assure you the whole of the large mass is now removed, with the exception of a small portion about the size of a half-crown, part of which is over the upper eyelid, which we are now touching more cautiously and slowly in order to save the eye from harm.

Yours, &c.,
Sunderland, August 29th, 1871. GEORGE BERWICK, M.D.

INQUEST AT BUCKLEY ON AN OBSTETRIC CASE.

THE case was a bad obstetric one, in which the forceps had to be used. The patient died after a few days, and an inquest was held, in consequence, according to the newspaper account, of some dissatisfaction with the medical treatment. At the post-mortem, a wound was found in the posterior wall of the vagina. In the opinion of the medical men examined—Dr. James Taylor and Dr. Waters, of Chester,—the wound had been caused by the blade of the forceps. Dr. M'Millan, the attendant, said he was not aware up to the time of the inquest that he had caused any injury of the parts. On hearing the facts, he explained the wound by a lurch of the patient. He was chiefly to blame, we think, in not having the assistance of another medical man. The jury passed a verdict of "Accidentally killed by the use of the forceps." We sympathise with Dr. M'Millan, who said he operated with care and caution, but advise him in future to make less objection to the assistance of medical brethren, which we all may need under the difficult and exhausting circumstances of bad labours.

An Inquirer.—Dr. Bateman's book on Aphasia is published by Churchill.

THE PRELIMINARY EXAMINATION AT THE COLLEGE OF SURGEONS.

To the Editor of THE LANCET.

SIR,—I am rather surprised that the letter in your issue of August 19th, signed "A Hospital Surgeon and County Magistrate," has not attracted more the attention of those who are almost as much interested in the subject as the candidates themselves: I mean the parents, who have to bear the cost. It seems to me that the parents are, in many instances, too indifferent; that they do not take the trouble to ascertain what will really be the nature of the examination to which their sons will be subjected, and to have them educated accordingly; but, having paid such charges as ought to have ensured them the education of gentlemen, consider their duty done. The consequence is, many are sent up (I will not say pell-mell and haphazard, but) insufficiently prepared, and get plucked (as in June) in the proportion of 133 to 100 successful. Anyone who has looked over the papers of the last examination will, I think, admit it "*is* such that lads of moderate abilities, who have just left school, cannot be fairly expected to pass." There are not many youths so clever as the medical chick who recently chipped shell who can afford to consider the questions, as a rule, very easy. The schoolmaster who can send lads up from his ordinary classes to pass such an ordeal as this only requires that his name should be known; his fortune is made thenceforth.

That the examinations are capricious, or not fairly conducted, there is not the slightest ground to suspect; but my own impression is that they are too severe just at present. Algebra has only recently been made a *sine qua non*, and I believe that Mathematics and Algebra have brought more candidates to grief than any other subjects. It is not well to press a new law too harshly. The amount of good to be expected from these preliminary tests is, however, incalculable. In years gone by, the College of Surgeons was the only channel through which people of inferior position and education could get into the profession. The much-despised Society of Apothecaries was the only examining body (for the general practitioner) that required anything but professional knowledge, and that consisted of a little Celsus and Gregory, Pharmacopœia and Prescriptions; but, little as it was, it did an immense amount of good. We all remember the confectioner who passed the College; besides him there were butchers, journeymen shoemakers, cabinet-makers, hospital porters, gentlemen's servants, and a host of other outsiders, who passed the College also. But how seldom did they pass the Hall. If they got any medical qualifications at all, it was probably German or Scotch; if they *did* pass the Hall, that little scrap of Latin cost them more time and trouble than all their medical studies together. The young men who come back mortified and angry at their want of success should reflect how much good will come of this; how much higher the tone of the profession will be; how much better the class of men with whom they will have to compete. It was not uncommon years back to hear qualified men placing the poor letters "v" and "w" in a state of utter confusion; the manner in which they victimised poor "h" was a caution. All that is of the past.

If your correspondent of the 26th instant had not been a "successful candidate," he would have received a card from the College officials, stating the precise grounds of rejection.

My advice to the rejected is: take heart of grace, and

August, 1870. TRY AGAIN.

Dispensary.—Unless we knew the size of the town, the available institutions already in existence, and many other particulars, we do not see how we could form an opinion. Our correspondent might consult Dr. Swete's Handy-book on Cottage Hospitals, published by Hamilton, Adams, and Co., Paternoster-row; and apply to some of the officials of public dispensaries for further information. There is an excellent one at Northampton.

Mr. H. D. Male.—We shall endeavour to find room for our correspondent's cases in the "Provincial Reports."

MEDICAL OFFICERS *v.* PAYMASTERS R.N.

To the Editor of THE LANCET.

SIR,—"R. N. O.," in his letter in your last impression, is unaware that surgeons become staff surgeons after twenty years' service, counting in this the *whole* of their assistant-surgeon's time; whereas in the case of the paymasters they become of the same rank as the staff surgeons *only after* fifteen years' *seniority*, but no part of their time *served* as assistant-paymaster counts; so that in order to reach the same rank as the staff surgeon, the paymaster serves from eleven to twelve years as assistant. This added to the fifteen years' seniority as paymaster makes his time from twenty-five to twenty-seven years. The surgeon reaches his in twenty years; and, besides, the pay of the assistant-surgeon is 17*s.* 6*d.*, while the pay of the paymaster of the same standing is 15*s.* They both enter the service or become assistants after twenty-one years of age. Yours, &c.,

August 28th, 1871. FAIR PLAY.

PHYSIOLOGY OF CHORDEE.

E. R. M. wishes for an explanation of the phenomena of chordee. That commonly given, and we believe it to be correct, is something of the following:—The urethra, the chief seat of the inflammation, is situated at the under surface of the penis. Owing to the effused products, the tissues around the urethra are rendered comparatively less extensible than other parts, and the corpus spongiosum, not being able to yield equally with the corpora spongiosa during erection, acts like the string of a bow, and chordee is the result. Mr. Milton, on the other hand, believes that it is due to spasm of the muscular fibres, described by Kölliker and Hancock as encircling the urethra in its whole course. Our correspondent may refer to Bumstead's Treatise on Venereal Diseases for further information. Bathing the genital organs with very hot water before going to bed, the avoidance of suppers and all stimulating articles of diet, a cool well-ventilated bed-room, and the use of camphor, with lupulin, hyoscyamus or belladonna, are, we believe, among the best remedies.

A Student had better apply to Mr. Matthews, Portugal-street, Lincoln's-inn-fields.

VACCINE LYMPH.

To the Editor of THE LANCET.

SIR,—Having been accustomed to regard the preservation of fluid lymph as a substantial addition to our art, I feel only partly consoled for my unfavourable experiences by the better success of others. My supplies of capillary tubes having been derived from various and trustworthy sources, and an almost total failure having attended their use, we are bound to look for an explanation to some cause affecting the whole. The mode of operation was the same in every case, the general average of patients unusually similar; and as I cannot doubt the purity of the lymph, I am still inclined to believe, with Dr. Sexton, that over-heating may occasionally exercise an injurious effect; and although the "expedient" of occlusion with sealing-wax may possibly be a "clumsy" one, I am bound to correct your correspondent who denies its possibility. I have thus preserved fluids in excellent condition during many months, and a very little trouble will enable him to verify my statement. Your obedient servant,

Fuscher Bad, Austria, Aug. 25th, 1871. R. FARQUHARSON, M.D.

Subscriber.—The Local Government Board Act is undoubtedly a reality, as our correspondent will gather from the fact (stated in last week's LANCET) of a President of the Board having been already appointed. The Act does not in any way affect the Lunacy Commissioners, or (so far as we are aware) the existing arrangements for the care of the insane. But the whole field of sanitary law and organisation will be opened up next session by Sir C. Adderley's Public Health and Local Government Bill, and we are not without hope that an endeavour will then be made to bring the supervision of the insane under the control of the Department of Health and Public Relief, which ought, we think, to be the title of the new Local Government Board.

Mr. John Gregory.—The County Court is the quarter to which our correspondent should appeal.

A CURIOSITY IN PRESCRIBING.

To the Editor of THE LANCET.

SIR,—A patient of mine consulted me this week for an attack of gouty dyspepsia. Last week he went for a change to —— well, I wont mention the locality. On the 13th instant he called in a medical man, who in three days wrote him seven prescriptions. On the third day the patient fled. The following is a list of the drugs prescribed and *taken*:—Podophyllum; pil. col. c. hyoscyamo; acid. nit. dil.; tr. chiretti; tr. aurantii; bismuth. trisnit.; ammon. carb.; spt. chloroformi; sodæ bicarb.; acid. hydrocyanici; pulv. trag. co.; leptandrin (?); ext. nucis vom.; ext. cannabis ind.; ext. al. aq.; ext. hyoscyami; spt. æth. sulph. co.; spt. ammon. arom.; potass. bicarb.; liq. op. sed.; mist. camphoræ; Pulna-water; soda-water.

Twenty-three separate preparations given in three days, not taking into consideration that some of them appeared in more than one prescription. Need we wonder that patients sometimes rush in despair from legal to illegal quackery? Faithfully yours,

Cheltenham, August, 1871. A. FLEISCHMANN.

Dr. James Stewart.—The proportion of strychnine in the various vermin-killers is liable to considerable variation. Dr. Taylor examined one of Battle's threepenny powders in 1863, and found it to contain three-quarters of a grain of strychnine.

Inquirer might probably learn by applying to the Grove Hall Lunatic Asylum, Bow.

H.—The idea of an antiseptic treatment of cholera is familiar to the profession; but there are no facts at present, as far as we know, which show the curative power of disinfectants. We want facts, not theories.

INFANTILE DIARRHŒA.

To the Editor of THE LANCET.

SIR,—I have been quite appalled by the amount and rapid increase of mortality in children and infants from diarrhœa, as reported in the returns for London, week ending 19th inst., and numbering 425. Having had occasion to treat not a few of such cases, and derived great benefit from the use of genuine ammon. citrate of iron, I write to suggest to my brethren of the profession, through THE LANCET, the free and persevering employment in this disease of the above drug, which has proved in my experience nearly a specific, and which, I am altogether confident, will in this London attack be had recourse to with the best results.

May I hope that those who use the citrate will state their experience, for the guidance of others, through the same channel.

Yours faithfully,

August 30th, 1871. D. G., M.D.

M.D., (Birmingham.)—Many authorities consider the diseases to be identical. There are others, however, who think that the differences between them are too marked for this to be the case. They contend that diphtheria is a contagious blood disease of asthenic type, with local manifestations commencing above the rima glottidis, and attended, as a rule, with a visible membranous exudation, and that it has paralysis and nerve lesions as sequelæ. On the other hand, croup is held to be a local disease of sthenic character, affecting the trachea especially, and commencing below the rima glottidis; that it is non-contagious, and unattended by the glandular swelling behind the jaw so common in diphtheria, and that it is not apt to be followed by any sequelæ.

Dr. L. M. Klein (Chelsea) is thanked for the offer made in his communication; but we regret that we cannot avail ourselves of it.

M.D., M.R.C.S.—We do not think so. The office is held and the duties are performed by many medical men.

SANITARY STATE OF ERITH.

A Subscriber, about to take a house at Erith, is desirous of knowing the sanitary condition of that place, and whether the sewage, which, he states, runs into the river, affects the atmosphere?

Mr. Christopher Jeaffreson, (Newcastle-on-Tyne.)—We will bear our correspondent's request in mind.

A CASE OF SPINA BIFIDA.

To the Editor of THE LANCET.

SIR,—I delivered a Mrs. D——, of Clarendon-square, on the 9th of this month, of a female living child, full grown. The tumour is quite translucent, and oval in shape; it measures two inches from dorsal to lumbar vertebræ, and laterally one inch and a half. It becomes congested after pressure of the fingers, also the face and hands become livid; it causes some paralysis of the lower limbs. Three days after her birth the tumour discharged a straw-coloured fluid; it is now quite full of fluid, and tense, with some slight ulceration of the surface. I do not like to inject it for fear of causing spinal meningitis, which I believe almost always occurs; therefore I have put on a hollow pad to protect it.

I should be glad of any suggestions through the medium of your readers who have had cases of the kind, also the percentage.

Yours truly,

Euston-road, August 17th, 1871. F. T. COATES, M.R.C.S. Eng.

Cerebro-spinal Fever.—Yes, the disease seems to have been obscurely described as having visited different portions of the European continent in the fourteenth, fifteenth, and sixteenth centuries, as well as later. It has appeared in the present century in various parts of France, Germany, Russia, Ireland, and the United States. We believe that some of the cases, at any rate, in which the symptoms of blood-poisoning with purple discolorations of the skin and petechiæ appeared, really belonged to this cerebro-spinal disease; but we should certainly be inclined to ascribe such appearances at the present time to the hæmorrhagic form of small-pox. So far as we know, the cases of this character described some years ago occurred when no small-pox was prevailing.

An Undergraduate.—In a former impression of THE LANCET we stated the fact of which our correspondent kindly gives us the particulars.

Mr. John Ewens.—Yes, the paper is in type.

A M.D. and Surgeon, married, with two young children, who is compelled in consequence of the ill-health of his wife to leave England and reside abroad, is desirous of ascertaining the names of any places in Europe or elsewhere in which he might prosecute his profession among the English residents with a fair prospect of success. He speaks French and Italian fluently. France, Italy, Spain, or South America would suit him equally well.

POISONOUS DYES.

To the Editor of THE LANCET.

SIR,—I have recently had under treatment a dyer, suffering from severe inflammation of the hands, consequent on the use of picric acid in his trade. The inflammation appeared to be of an erysipelatous character, without vesication; great swelling; itching and smarting described as intense; skin afterwards cracked and peeled off. He derived most relief from the application of olive oil. He tells me that this picric acid came into use with the aniline dyes. It is applied in combination either with sulphuric or acetic acid, or cream of tartar, for the purpose of striking a *heavy yellow*. He had been taking the material from the vat, and wringing it.

It is very probable that any garment dyed thus, becoming moist by perspiration or otherwise, would set up great irritation.

Yours faithfully,

Hackney-road, August 28th, 1871. C. W. LATHAM, M.R.C.S.

ICE-HOUSE.

A CORRESPONDENT, being desirous of constructing an ice-house, wishes to ascertain the best mode of proceeding.

Mr. J. A. Calasterients.—We think our correspondent owes an explanation to all those whom he misled by any unintentional misrepresentations. He should not have been misled so easily.

Inquirer.—A licence in Midwifery is required. For answers to the other questions, we refer our correspondent to the regulations of the Poor-law Commissioners.

Mr. E. W. Paul is referred to the Students' Number of THE LANCET, to be published next week.

An Old Guy's Student would obtain the information by writing to the Secretary of the institution.

Mr. Fredk. Rule (Ashford) is thanked; but his criticism is at once hasty and inaccurate. "Imperious" is the word used by Shakspeare; and "Imperial," in such a relation, would be nonsense, or at least redundancy. Cæsar was Imperator; and to call an Imperator "imperial" would be like calling a lily liliaceous. To call him "imperious," however, would in most cases be only the expression of a fact. We speak of His Imperial Majesty, but then it is the majesty that is imperial, not the Emperor; and we speak of a Prince Imperial—i. e., of a Prince who is likely to become an Emperor, but who has not yet attained that dignity.

ERRATUM.—In the last line of the article headed "Fermentation and Disinfection," published in our last issue, page 304, for "100 cubic feet," read "10 cubic feet," &c.

EVERY communication, whether intended for publication or otherwise, must be authenticated by the name and address of the writer. Papers not accepted cannot be returned. Articles in newspapers, to which attention is sought to be directed, should be marked. Communications not noticed in the current number of THE LANCET will receive attention the following week.

COMMUNICATIONS, LETTERS, &c., have been received from—Dr. H. Bennet; Mr. Spence; Mr. Saunders; Dr. Bradbury, Cambridge; Mr. H. Chawne; Dr. Gibb, Rathdrum; Mr. E. Rankin, Chester; Mr. Phillips, Tottenham; Mr. Carroll, Stepney; Mr. Gilruth, Edinburgh; Mr. Grant; Dr. Millar, Edinburgh; Mr. Scott; Mr. Wyles; Dr. Popham, Nottingham; Mr. Park; Mr. Dobbin; Mr. Parry; Dr. Hefferman; Mr. Payne; Dr. Thomas, Maesteg; Dr. Walters, Reigate; Mr. Healy, Clare Castle; Mr. Brooks; Mr. Harvey; Mr. Custance; Mr. Sharpe, Caterham; Mr. H. J. Jupp; Mr. R. Chambers; Dr. Condon, Cawnpore; Dr. Barry, Twickenham; Mr. Johnston, Scarborough; Mr. Eady, Darlington; Mr. Eddison; Mr. Waller, Rhymney; Mr. Green, Canterbury; Mr. J. Stephens; Mr. R. Rainbow, Wallingford; Dr. Short; Mr. Wood; Mr. P. Ewell, St. Heliers; Mr. Hearne, Alresford; Mr. Shepheard; Dr. Barthold, Vienna; Dr. Radford, Higher Broughton; Dr. Provis, Bath; Mr. Collings; Mr. Green, Templemore; Mr. E. Headry, Ware; Mr. Hunter, Redhill; Mr. Macaulay, Ventnor; Dr. Tellet, Ramsey; Dr. Sumpter, Cley-next-the-Sea; Mr. Wilkinson; Mr. Wilson; Dr. Bell; Mr. Hepworth; Dr. R. Baxter; Mrs. Arnott; Mr. Kitto; Mr. Alexander; Dr. Prince, Jacksonville; Mr. Kelly; Dr. Gill, Dover; Mr. C. Meats; Mr. Warner; Mr. Cross; Mr. Tomlin; Mr. P. Taylor; Dr. Berwick, Sunderland; Mr. Ewens, Cerne Abbas; Dr. Wiltshire; Mr. W. Atkinson; Mr. Hunter; Dr. Griffiths; Mr. T. Heal; Mr. Whalley; Mr. S. Davison; Messrs. W. Harrison and Son; Mr. J. Dolland; Mr. Morton; Mr. Jenks; Dr. Taylor, Nottingham; Mr. Simpson; Mr. P. Simmonds; Mr. Latham; Mr. J. Goode; Mr. Gregory, Manchester; Mr. Brown, Clifton; Mr. Carter; Dr. Kerr; Mr. Fleischmann; Mr. Ernest; Mr. Maskell; Mr. R. George; Mr. Douglas; Mr. Owthwaite; Mr. Pearce; Mr. W. Jones; Mr. Cooper, Epsom; Mr. Fisher; Mr. Greenhill; Mr. Jackman; Dr. Lee, Washington; Mr. G. Croxtan; Dr. Smith; Dr. Nankivell, Torquay; Mr. Rawlings; Dr. Bowles, Folkestone; Mr. J. Leach; Mr. Whitford; Mr. A. Mackie; Mr. Andrew; Dr. Abrath; Dr. Chaplin; Mr. Burton; Dr. Brailey, Cambridge; Mr. Abraham; Dr. Farquharson, Fuscher Bad; Mr. H. S. Smith; Dr. Klein; Mr. Reeve; Mr. Williams; Mr. J. C. Johnson; Mr. Dunlop; Mr. Laine; Dr. Walker; Dr. Argles, Wanstead; Mr. Hawker; Mr. Boodle; Mr. Benton; Mr. Lee, Cheltenham; Mr. Baker; Mr. Sydney, Collumpton; Mr. Eaton; Mr. Bartram; Dr. Jeaffreson, Newcastle-on-Tyne; Mr. H. B. Ingram; Mr. Richards; Mr. Tryllie; G. R. H.; A. F.; Ignoramus; M.D.; B. N. H.; Iota; Sanitas; M.R.C.S.; F. F.; E. B.; L.R.C.P.; Subscriber; Try Again; Fair Play; Punis; Medicus; Inquirer; D. O., M.D.; Novitia; A Seventeen Years' Subscriber; H. W.; M. P.; A Surgeon; &c. &c.

Southampton Times, Public Opinion, Glasgow Herald, Preston Chronicle, Carmarthen Journal, Ardrossan Herald, Sussex Coast Mercury, Times, Saunders's News-Letter, Tiverton Gazette, Monmouthshire Herald, Devonport Independent, and *Carnarvon Herald* have been received.

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[Extract from the **MORNING POST** of **February 2nd, 1871.**]

"AN IMPORTANT IMPROVEMENT IN CARRIAGE CONSTRUCTION.—Numerous accidents of a most deplorable and alarming character have proved beyond a doubt that the use of hickory wood and steel tyres in carriage building is an extremely dangerous practice, and one which, in the interest of public safety, ought to be discarded. It is useful, therefore, to know that Carriages of every description, and Miniature Broughams in particular, of elegant design and first-class workmanship, are now made by Mr. Strong, the well-known Carriage Builder, of Long acre, of well-seasoned English woods, and that many very severe experiments have fully confirmed the superiority of these home materials. Mr. Strong has evidently endeavoured to lead the van of progress in the art of carriage manufacture, and by a happy combination of art and science in his work has certainly succeeded in producing some of the most graceful, durable, and comfortable Broughams and Landaus ever seen. The attainment of extraordinary lightness with great strength, of luxurious ease with remarkable beauty, and, above all, of considerable economy in cost, are matters very interesting to those who watch our national progress in this branch of trade. Few persons who find a really good carriage indispensable can fail to appreciate the attractive improvements mentioned. Mr. Strong offers every facility for the public to avail themselves of these improvements by the three-years purchase system."

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